THE NEW YORK
JOURNAL OF MEDICINE

FOR JULY, 1858.

PART FIRST.

ORIGINAL COMMUNICATIONS.

ART. I.—*An Account of some Cases in Surgical Practice, by* C. E. ISAACS, M.D., Consulting Surgeon to Kings County and Blackwell's Island Hospitals, etc., etc.

1. *Case of an anomalous sac or pouch, connected with the membranous portion of the urethra.*—This case occurred in the practice of Drs. Otto Rotton and Rice, to whom I am indebted for the opportunity of making the post mortem, and of giving an account of the case, and of the very remarkable accompanying specimen. The patient was a native of Scotland, 85 years of age, of whose medical history little was known; it was, however, ascertained that he had had much difficulty in passing his water for many years. When Drs. Rotton and Rice were first called to him, he complained of inability of making water, and had also some obscure symptoms of peritonitis. All attempts to pass the catheter were unavailing, and another excellent surgeon, who was now sent for, was also unsuccessful. On examination per rectum, it was ascertained that there was very little urine in the bladder. The symptoms rapidly increased in severity, notwithstanding the most judicious treatment, and the patient died in about sixty hours from the commencement of the attack. I did not see the patient until after death. On making the post mortem, with the assistance of Drs. J. M. Minor, Rotton, and Rice, I found the peritonæal surface of the small intestines much inflamed, and covered at various points with coagulated lymph and pus—a knuckle of small intestine, which had fallen down into the cul de sac, between the bladder and rectum, was more intensely

inflamed than any other part. The bladder contained but a few ounces of urine; its coats were much thickened. The prostate was considerably enlarged. The canal of the urethra was unusually small, and so much contracted in several places, as only to admit with difficulty, the passage of the smallest bougie. But the point of greatest interest was discovered in the membranous portion of the urethra, the inferior wall of which was deficient. Thus an opening was formed, about the size of a shilling, which in fact was the mouth of a sac or pouch, which was ascertained by actual experiment to be capable of containing upwards of an ounce of fluid. This pouch extended underneath the prostate, and backwards and upwards, until the superior edge of the posterior wall of this sac was considerably above the line of reflection of the peritonæum from the bladder on to the rectum. This cavity was lined throughout by mucous membrane, which was examined by the microscope, and found to be covered by epithelial cells, similar to those of the bladder and urethra. In the posterior wall of the sac, a rounded opening about the size of a three cent piece, was discovered extending through into the peritonæal cavity. The edges of this hole were in a gangrenous condition, and through it the urine had found its way into the recto-vesical cul de sac of peritonæum, and had produced an intense and fatal local peritonitis. There can be little doubt, that the mucous pouch had been of many years standing, and that it usually contained more or less urine; as to the manner in which this pouch was formed (if not congenital, which seems to be improbable), may we not reasonably conclude, that it originated in a false passage, made by attempts to introduce instruments, and that this passage became gradually lined by a prolongation of mucous membrane? The urine as it issued from the bladder, being prevented from freely passing forwards by the strictured state of the urethra, would thus tend to pass backwards, and slowly dilate the sac, in proportion to the force of contraction of the bladder upon its contents. At length, after many years, the pouch had become so much enlarged, as to approximate too closely to the peritonæum, when inflammation took place, at the point of greatest contiguity. This was speedily followed by local gangrene, perforation and entrance of urine into the peritonæal cavity, with consequent peritonitis and death.

The greater difficulty, and indeed impossibility, of passing a catheter, in this case, is now sufficiently evident, for with all the care and caution in keeping the point of the instrument along the upper wall of the urethra, it would be almost, or quite certain, to stray from its true course and enter the pouch, in-

stead of the cavity of the bladder. Having never met with a case similar to the one just described, and believing it to be very rare, I have deemed it of sufficient interest to be recorded.

2. *Case of ligature of the common carotid artery, in the lower half of its course.*—M. H., a large muscular man, 38 years of age, was admitted into Kings County Hospital, with an encephaloid tumor, of twelve months' standing, involving the deep seated cervical glands, in the upper part of the anterior region of the neck, and also the integuments which were indurated, and of a very dark red color. The pain was very severe and almost constant, from the rapidily increasing growth and consequent distension of the parts. As extirpation was impracticable, I proposed to him, merely as a means of temporary relief, the ligature of the common carotid. He promised to consider it, and in one week afterwards I received word that he had consented to the operation. I may here state that there were present, on this occasion, Dr. Turner, Resident Physician; Drs. J. M. Minor, Hutchinson, Langdon, Drake, Cochran, Brooks, and many other physicians. On examining the patient, I found, to my great surprise, that the tumor had increased to nearly twice its previous size; that it had involved the glands and other structures, even lower down than the middle of the neck, that it encroached upon and overhung the lower third of this region, and that the integuments here had become exceedingly vascular, so that the difficulties of ligaturing the carotid had become immensely increased. So great was the derangment of parts, that I found it very difficult to discover the inner edge of the sterno mastoid. Having, however, determined this point, I made an incision, just above the upper border of the sternum, and extended it about two inches upwards, along the edge of this muscle. The hemorrhage from the skin, which alone was divided, was very profuse. The subcutaneous fat, platysma and superficial fascia, were all matted up together. Every touch of the knife, in passing through these structures, was attended by very great hemorrhage. In passing downwards also towards the deeply seated vessels, the greatest caution was found to be necessary, inasmuch as any separation of the parts, even by the handle of the scalpel, or by the fingers, was followed by a most profuse hemorrhage. However, by the use of ice, temporary pressure, and patient waiting from time to time, I at length arrived at the sheath of the carotid, and then waited a few minutes, until all the bleeding had ceased. The carotid could now be felt pulsating at the bottom of a narrow cavity, and nearly three inches in depth, from the surface. The sheath was now cautiously

opened, and the ligature passed under the artery without the least difficulty, by means of Mott's aneurism needle. The artery was then tied, at a point an inch and a half above the superior margin of the clavicle. No unpleasant symptoms followed the operation. The ligature came away on the sixteenth day, and the wound healed up without any difficulty. The result of the operation, was to diminish the pain, and to check the growth of the tumor, for about ten days only. After this period, it began to increase with the accession of pain, and has since pursued its course, as before the operation. In similar cases, the ligature of the carotid has often, perhaps, usually relieved the patient for a much longer time than in the present instance. In such a hopeless disease as cancer, we are often glad to avail ourselves of any chance of relief, even if this promises to be only for a short period. I have recorded the above case, as it seemed to me, that some of the facts herein related might be useful, and also because it often happens that more is to be learnt from our unsuccessful cases, than from those which are attended with a fortunate result.

3. *Removal of an encephaloid tumor of the vagina.*—For the opportunity of treating the following case I am indebted to Dr. J. Marion Sims, who very kindly referred the patient to me, he being unable to attend to her, at that time, as he was obliged to be absent from the city for several days. Mrs. S., aged 60, residing in Williamsburgh, the mother of several children, had been conscious of the presence of a tumor in the vagina, for the last six months. This had not occasioned any pain, but much annoyance, and a constant muco-purulent discharge, etc. On the 28th of April, with the assistance of Dr. Colt, her family physician, she was placed under the influence of chloroform. I found then a tumor occupying the inferior two-thirds of the vagina, attached to the lower wall of that canal, and closely in contact with the upper wall of the rectum. I drew down the tumor to some extent, made an incision around it, and through the mucous membrane, and then enucleated it, without much difficulty, taking care not to injure the rectum. The tumor, when removed, was found to consist of spherical masses, connected together, so as to resemble a bunch of grapes. From its appearance, when incised, and also under the microscope, where it was seen to be composed of nucleated cells of various sizes and forms, it was believed to be encephaloid cancer. About a fortnight after the operation, I visited the patient, and found that portion of the vagina, from which the tumor had been taken, entirely healed, but that a small tumor, about the size of a half ounce leaden ball, had appeared, just within the orifice of the vagina. This I immediately

removed, and found it to be of the same character with the other tumors. I have just seen the patient. The parts have entirely healed, and there is no sign of any reappearance of the disease, yet the probability is evidently in favor of its return. The patient has at present a tumor in the groin, as large as a small orange, painless, and causing very little annoyance. She is unwilling to have it extirpated. It is also, probably, of an encephaloid character. It is believed, that the variety of tumors of the vagina, similar to those which have been described, and especially as unconnected with the uterus, will sufficiently justify the publication of this case.

4. *Cancer of the caruncula lachrymalis* (*encanthis*).—On the 8th of May, I was requested by Dr. J. H. Rhodes to visit with him a boy aged 13 years, and who had had a tumor in the internal angle of the eye for the last nine months. It had appeared without any evident cause, was painless in itself; but there was considerable circumorbital pain, and lately had begun to interfere seriously with vision. The tumor evidently consisted of two lobes, one attached to the inferior and the other to the superior eyelid. It was of a dark red or almost purple color. Immediate extirpation was recommended, and performed at my first visit. The boy having been placed under chloroform, I made an incision, commencing at the external commissure of the eyelids, and extending outwards about half an inch. This allowed the eyelids to be strongly everted.

I then dissected the inferior lobe of the tumor from its attachment to the eyelid, and removed it entirely. The superior lobe was then carefully detached from the upper eyelid. It was found to pass inwards, for about three quarters of an inch, and was easily separated from the periosteum covering the os unguis, and the inner wall of the orbit. Every vestige of it was carefully removed, as far as could be ascertained. Great care was taken not to injure the globe of the eye, or the muscles or nerves, so far as these could be avoided. It is now twenty-three days since the operation. The patient has perfect vision, and complete control over all the movements of the eye. It is, however, much to be feared that the disease will return, inasmuch as the tumor consisted of cells, which were undoubtedly cancerous.

5. *Case of removal of a tumor from the calf of the leg, which had caused neuralgia for sixteen years—Recovery.*—Mrs. ———, a lady aged 50, of nervous temperament, and the mother of several children, consulted me on the 8th of April last, on account of a neuralgia of the calf of the leg, which had existed for 16 years. It had originated without any evident cause, and had resisted all the various general and local remedies

which had been applied by different practitioners. On examination of the limb, I could not discover any distinct tumor, although there was an obscure and ill-defined *lumpy* feel of the part. The most gentle handling of it, always excited severe pain, which usually continued for three or four days, with more or less severity. I prescribed such general and local remedies as were calculated to soothe and diminish the irritability of the nervous system, and to reduce the sensibility of the affected part. These were continued for about a fortnight, without the least benefit.

After making then as thorough an examination of the part as practicable, I came to the conclusion that there were probably tumors formed upon, or among the fibres of some of the nerves of the limb, perhaps similar to those upon amputated stumps, or least some diseased condition of the nerves, which might be discovered by the knife; and proposed to the patient, that she might allow me to make an incision into the leg, in order to ascertain the precise condition of the parts affected, and then to do whatever might be necessary under the circumstances of the case.

She readily assented, and accordingly on the 24th of April, assisted by Dr. J. M. Minor, and Drs. Dunn and Mulhallon, I performed the following operation—the patient having been rendered perfectly insensible by the administration of sulphuric ether.

Two curvilinear incisions were made in the centre of the calf of the leg, so as to include an elliptical portion of the integuments, about 3 inches long, and 1½ broad. This being removed, was carefully examined, but nothing abnormal could be detected either in the skin, the subcutaneous fat, and cellular tissue, or the fascia. The expanded and glistening tendon of the gastrocnemius muscle, was now fully exposed. It appeared to be more convex than usual, and an indistinct sensation of some foreign body could now be felt underneath it. This tendon was then split down its centre, for about four inches, when a dark colored and exceedingly vascular tumor came into view. This was subsequently found to occupy the entire thickness of the soleus muscle. Posteriorly it was in close contact with the posterior tibial vessels and nerve, and was separated from them with considerable difficulty. The tumor, when removed, was found to be about the size of the longitudinal half of a hen's egg, and was composed of a mass of veins (resembling a bundle of earthworms, as is often seen in cases of varicocele), and of the degenerated substance of the soleus muscle. Scattered through its substance were six rounded stony or calcareous concretions, some of them of the

size of a half ounce leaden ball, and others of that of small peas. They were exceedingly hard, and each one was inclosed in a serous cyst. They were probably composed of the phosphate and carbonate of lime; one of them, which was not so hard as the others, contained a small quantity of hair, in its centre. The patient has recently informed me, that she first felt the neuralgic pain in her leg, three days after the birth of her child, which is now 16 years old.

Is it not probable, that, at the time of birth, the head of the child might have pressed upon the veins in the pelvis, in such manner as to cause congestion of the inferior extremity, and dilatation of the veins in the substance of the soleus muscle; and that, subsequently, the stony concretions were formed among these dilated vessels?

It seems reasonable to suppose, that these stony concretions were in contact with nervous filaments, and were made to press upon, and irritate them, during each contraction of the muscles of the leg; inasmuch as every step in walking was attended with excruciating pain. Since the operation, the neuralgic pains, which had so long tormented the patient, have entirely disappeared, and the wound is at present almost healed.

ART. II.—*Simple Tests for some important Medicinal Preparations.* By EDWARD R. SQUIBB, M.D.

THERE is no branch of commerce wherein the competition of trade is more rapidly and more certainly tending to deteriorate and debase the quality of manufactured products than that which deals in medicinal substances; and there is none where the interests of the consumer are more remotely considered in manufacturing, or where these interests are so difficult to guard and protect; whilst there is assuredly no branch whose operations and productions are of more vital importance to the community and the profession of medicine.

An important collateral effect of this debasement of medicinal substances, which does not receive due consideration in the profession generally, is that the effects of the uncertainty and bad quality of these substances are transmitted directly to the practice of medicine, and in failing to fulfill the indications to their use, they not only bring distrust and discredit upon both the science and art of medicine, but also tend directly to foster and uphold the quackeries and nostrums of the day, in many ways. For instance, a physician prescribes the compound cathartic pills of the pharmacopœia. They either act drastically, inadequately, or they do not act at all. The patient says

the doctor does not understand his business, and the next time buys "Brandreth's Pills" or some other nostrum, and is better satisfied with the result. The circumstance that the compound cathartic pills were made from bad and deficient materials, and through competition in trade were unduly active from the addition of some cheap drastic, or inert from consisting mainly of starch and gum, whilst the extracts from which the nostrum was made had been much more carefully prepared—is quite overlooked by both practitioner and patient to the lasting injury of the interests of both. It is, however, a fact that a large proportion of the compound extract of colocynth sold, is manufactured from materials so cheap and so bad that it is rarely quoted in prices current at much above half the price of the crude materials from which it should be made; while the writer has known of several hundred pounds having been made and sold within one year at a price below one third of that which the good materials directed by the pharmacopœia would have cost.

Another fertile source of bad and imperfect medicinal substances lies in the use, in manufacturing, of cheap substitutes and by-products, and in utilizing residues for improper purposes, so that through many ways the tendency is constantly increasing whereby the science of medicine is subsidized and radically injured by the debasement of the agents upon which the success of the art of medicine so much depends.

The check or remedy for this evil tendency rests entirely and only with the profession, and may be found in various ways, but in no way more easily or more certainly, for such substances as admit of it, than in the application of simple and reliable tests.

The writer having for some years past been engaged in manufacturing preparations of known character, for the navy, by the United States officinal standard, has had the opportunity of observing their properties pretty closely, and has collated and originated a few simple and easy tests of quality which it is the object of this paper to communicate to the profession. These tests require little time, skill, or apparatus, and are adapted to the extemporaneous use of the physician or apothecary, so that they may be conveniently applied at the dispensary counter or upon the office table. They consequently do not aim at critical accuracy, but at the more important point of practical discrimination.

A very important general indication of quality in medicinal substances is the source from whence they come, and the channels through which they may have passed. The profession should obtain a better and more critical knowledge of the various manufactures, that due weight might be given to the

names associated with the preparations they use, and should then be more careful to observe that the authenticated label of the manufacturer is affixed. In the common desire to be considered as manufacturers, and from the indisposition to circulate or publish others' cards or names in connection with preparations sold, it is becoming quite rare to find the name of the real manufacturer upon the packages of medicinal preparations. They are commonly sold without evidence of their source, and therefore without any real responsibility upon any one. The traditional or reputed character with which they commonly pass through the various hands to the profession is too often without other foundation than the disposition to buy cheaply and sell at large profit. From the circumstances that few apothecaries manufacture even their more simple preparations, and that there can be no proper responsibility in a verbal character transmitted through several persons, the professions both of medicine and pharmacy should be more careful that their packages are duly authenticated from the desired sources, as general tests or evidences of quality. A very large proportion of medicinal substances must depend mainly upon some such evidences of quality until their therapeutic value is determined in practice, since they are beyond the easy reach of chemistry, and since sensible properties are so often deceptive. Among those which are susceptible of easy practical discrimination by simple means the writer is at present able to offer the following:

Ether.—A strip of unsized paper, or a clean glass rod, dipped into the ether and allowed to dry for a moment or two, will by the odor it gives, afford evidence of the less volatile impurities that it commonly contains. There usually remains a somewhat aromatic slightly-pungent odor, that is not hurtful in the more dilute ether used for common medicinal purposes, but the disagreeable oily odor often found is more objectionable, whilst really good ether should leave no odor whatever. The ether used for inhalation should leave upon the sponge, paper or rod no foreign odor at all.

The strength of ether is less easily ascertained except by a specific gravity instrument. With a little practice, however, with some good specimen for comparison, a very satisfactory estimate may be found by observing the slowness or rapidity with which any given specimen evaporates from the palm of the hand. Ether for inhalation should give off bubbles of vapor rapidly at the temperature of the palm of the hand. A thin test tube, containing the specimen, should be grasped firmly for a minute or two, and then the ether should be stirred at the time of observation. The bubbles arise from the points of contact between the tube and stirrer.

Compound spirit of ether—Hoffman's anodyne.—Two drops of officinal spirit stirred into a pint of water give to the mixture a distinct oily surface, and the peculiar fruity, aromatic odor of the heavy oil of wine free from the odor of ether and alcohol. Sixty drops in the pint renders the water decidedly turbid. While, with four fluid drachms to the pint, a scanty precipitate of minute oil globules occurs after a few minutes' standing. The fruity, apple-like odor is characteristic of the chief anodyne ingredient, the oil of wine, and is entirely wanting in the ordinary commercial article. Without the oil of wine the preparation is a stimulant antispasmodic. With the oil it is a highly valuable anodyne antispasmodic, particularly adapted to nervous irritation and hysteria. The liquid universally sold as Hoffman's anodyne is a residue of the ether-making process, containing varying proportions of ether and alcohol with a little etherole or light oil of wine, but in no single instance of the many examinations made by the writer, has any true heavy oil of wine been found in it. Heavy oil of wine, from being expensive and somewhat difficult to make, has finally been entirely omitted from the preparation, and is now hardly to be met with in commerce. While as a consequence, the preparation to which it belongs, from a failure to meet the proper indications to its use, is become a stimulant, and slowly going out of use.

Spirit of nitric ether.—Two or three fluid drachms of good sweet spirit of nitre that is not more than seven or eight months old, and kept in the usual way, contained in an ordinary test tube, and plunged into water that has been previously heated to 164°, will boil pretty actively. While, if freshly made, or not more than two months old, or if well preserved from light and air, no matter what the age, it will boil actively when surrounded with water at a temperature of 156°. From the fact that this among other liquids may be heated far above its boiling point without ebullition, it becomes necessary to drop a few small fragments of broken glass into the test tube with the spirit after the latter has been heated and while still held in the water. Another precaution necessary in the application of this test, is to discriminate between the mere formation of small gas bubbles around the fragments of glass, and a true ebullition. For whilst the former will occur as a fine effervescence, at any temperature above 140° in any spirit of nitre that contains hyponitrous ether at all, true ebullition, in which the vapor bubbles are much larger and in which they reach the surface and form, by their succession, a bead around the edge of the liquid, only occurs at the boiling points named. The preparation should not be quite colorless, but of a pale straw tint, and

should effervesce very slightly upon the addition of carbonate of ammonia. When slightly acid, carbonate of ammonia is the best corregent, because the salts formed are therapeutically similar. The officinal preparation is a solution of five per cent. of hyponitrous ether in alcohol. The ether is the medicinal agent, and the alcohol is necessary for its preservation and dilution only, the latter indeed being often contra-indicated, as in some febrile conditions, where the former would be useful. In commerce, however, it is rare to find the proportion of the hyponitrous ether exceed 3 per cent. While in a great majority of cases it is below 2 per cent., and often in a proportion too small to be detected except by the odor. One of the largest manufacturers in the United States makes it of five different qualities to suit the market, and all these below the officinal standard. Another maker (and the two produce a very large proportion of all that is sold in the United States), sells but one kind, and that, though of varying strength, is commonly below 2 per cent. The above test alone will reject all such specimens. It thus happens that the physician who prescribes this preparation in view of its supposed diuretic and diaphoretic effects is disappointed, and obtains instead the, to some degree, opposite effect of so much alcohol. Hence this preparation also is gradually falling into disfavor and disuse. In view of the circumstances mentioned in connection with these preparations, and the like tendency in many others, it is well worth while for the profession to consider how far it is willing to sacrifice its valuable curative agents to the cupidity of manufacturers. For detailed examination of specimens of sweet spirits of nitre, Hoffman's anodyne, etc., etc., see *American Journal of Pharmacy*, vol. xxviii. p. 302 et seq.; vol. xxix. p. 202 et seq.

Chloroform.—When equal volumes of chloroform and colorless concentrated sulphuric acid (the strong commercial oil of vitriol answers very well) are shaken together in a glass stoppered vial there should be no color imparted to either liquid, or but a faint tinge of color, after twelve hours' standing together. Nor should there be any heat developed in the mixture at the time of shaking it first. Any particles of dust, or cork, or other organic matter that may have been in the vial used, or in the chloroform, will, by reaction of the acid, produce a tinge of color in the acid or its separation from the chloroform, corresponding to the quantity of such particles present, and therefore in the application of the test care must be taken to avoid any such particles. Or if the acid be only faintly tinged at the end of twelve hours' contact with the chloroform, it may be attributed to some such collateral accidental cause.

But if at the end of twelve hours, or sooner, the acid becomes yellow, or brown, or any darker color, it should be unhesitatingly rejected. If the mixture of acid and chloroform should become warm on shaking first, an admixture of alcohol would be indicated. One or two fluid drachms of chloroform spontaneously evaporated from a clean surface of glass or porcelain, or from a piece of clean unsized paper, should leave no odor after it. Commercial chloroform generally will turn the acid brown within two or three hours, and will often render it black and tarry looking within two or three days. Whilst with chemically pure chloroform there is absolutely no reaction within many days.

Calomel.—The most common and injurious contamination of calomel is corrosive sublimate, whereby its otherwise mild action is rendered irritant. This impurity is easily detected by shaking a drachm or two of the calomel in a test tube with distilled water, and, when the water shall have become clear, adding a drop or two of liquor ammonia. If corrosive sublimate be present the ammonia will precipitate it and render the water cloudy.

Iodide of mercury—is often irritant and harsh in its action through contamination with biniodide from faulty preparation. The writer has seen its use abandoned upon the ground of idiosyncrasy, when on examination it was easily shown to contain a notable proportion of the irritant harsh red iodide. The red iodide may be easily detected in it by rubbing a little of the suspected iodide in a mortar with strong alcohol, and then allowing it a few moments to dry. The evaporation of the alcohol leaves the red iodide along the pestle marks as a border to the iodide. A minute contamination becomes very easily seen in this way.

Mercury with chalk.—is of late very commonly found to be harsh and irritant in its action, producing or increasing intestinal irritation to such an extent that many practitioners have abandoned its use, while others are puzzled by its effects.

This also is a result of faulty preparation, wherein through time and labor-saving expedients, or bad appliances, a portion of the mercury becomes oxidized instead of being simply comminuted or divided. However well prepared, it almost always contains a very small proportion of suboxide, but this being one of the mild preparations of mercury, never produces the bad effects alluded to. To detect the peroxide, or irritating property, a drachm or two of the mixture is treated with an excess of acetic acid, and the solution filtered off clear. A few drops of hydrochloric acid is then added to the clear solution. If the preparation be good, this will produce only a slight pre-

cipitation of insoluble subchloride from the small quantity of acetate of suboxide formed. If the preparation be old, or badly kept, having had free access of light and air, a pretty copious precipitate will be formed by the hydrochloric acid. The clear solution is again filtered or decanted off this precipitate, and liquor ammonia added to it. If the preparation was contaminated with any peroxide it will now be precipitated by the ammonia as white precipitate. See *American Journal of Pharmacy*, vol. xxix. p. 388.

Blue pill—is also liable to contain oxides of mercury, and thus to lose its mild character and operation through faulty preparation. In this the oxides are detected in precisely the same way as in the case of mercury with chalk.

Iodide of potassium—is occasionally contaminated with carbonate of potassa to the extent of impairing its medicinal effect. This is easily detected by adding lime water to the solution of the iodide, when carbonate of lime will be precipitated and render the mixture cloudy.

Bitartrate of potassa—frequently contains much tartrate of lime. This may be detected by stirring a few drops of liquor ammonia into a mixture of a few grains of the specimen in two or three drachms of cold water. The ammonia renders the otherwise insoluble potassa salt quite soluble, whilst it has no immediate effect on the tartrate of lime. If then a portion remains undissolved after the application of the test, it may be regarded as an impurity.

It is hoped that the simplicity of these tests for a few important substances may not only lead to their frequent adoption, but that the opening of the subject may stimulate others to search for and publish better tests, and to extend the list of substances that may be easily and simply tested.

MARCH, 1858.

ART. III.—*On Matters of Novelty or General Interest, as at present exhibited in the Practice of the Hospitals of Paris.* By GEO. SUCKLEY, M.D., late Assistant Surgeon, U. S. Army.

THE Parisian journals of medicine, like those of all other countries, are constantly filled with new projects and methods of treating disease, which, although backed up by successful statistics, real or apparent, and the publication of isolated cases, merely live their day, and are shortly after forgotten.

I do not, therefore, purpose to take up all the novelties in medical treatment which have been advocated during the past winter, but merely to glance at a few of the leading matters that have lately caused more or less sensation in the medical

world of Paris. Without classifying directly, into two groups, the double subject contained in the title of this article, I shall treat of the "matters of general interest" whenever their introduction is naturally induced by their connection with the novelties.

Foremost among the new things of the day, is the revival of Laennec's antimonial treatment of chorea. The novelty of the renewal consists in the exaggeration of the plan, and the heroic doses administered. To Mons. Gillette, of the Hôpital des Enfans Malades, is due the credit of the renewal of the antimonial treatment, which is now pursued as follows, for children say eight years of age:

The first day 20 centigrammes* of antim. tart. is given; on the second, 25; on the third day, 30. These quantities are dissolved in about three ounces of gum-water, and commence to be given to the patient, fasting, at an early hour of the morning, at the rate of a tablespoonful an hour, until it is all taken. During the administration of the doses no solid food is allowed, but the patient may take a little clear broth; the patient is also kept on his back while taking the medicine, but in the afternoons is allowed to get up and eat the usual hospital diet. If this course has not been sufficient, you will wait for the space of four days before recommencing the treatment, giving them 40 centigrammes (about 7 grains) of the remedy, in the same way, on the first day, and increasing the dose 5 centigrammes (nearly 1 grain), for each of the two succeeding days, observing the same regulations as before. If this does not cure, you again wait four or five days, and then commence with 55 centigrammes, augmenting the quantity daily, as before, and following the same rules. If the drug operates too much on the intestines, add a little laudanum to the solution. If these trials do not effect a cure, or cause radical amelioration, the treatment by tartar emetic should be abandoned. (NOTE.—The foregoing statement of the doses, etc., I have got from Dr. Miller, who has carefully watched the practice of the Hôpital des Enfans Malades. Dr. M. says that the children with this disease *generally* tolerate these large doses very well.

Blache, at the Hôpital des Enfans Malades, until recently, relied upon the shampooing process in treating children for chorea. When employing this latter method the average time of cure was twenty-five days. Blache now has, to a certain extent, abandoned the shampooing treatment for the antimonial; but not entirely, as a very obstinate case has lately resisted the complete exhibition of the antimonial treatment, in which he

* 100 centigrammes make a *gramme*, which is a fraction over 15 grains.

has been obliged to return to the shampooing process. This is nothing more than an addition to the mountain of proof that we cannot obtain *specifics* in medicine.

Becquerel does not seem to think much of the foregoing plan, as shortly after it had been publicly proposed, I saw a case of severe acute chorea in his wards, which he treated in the common-sense way by following the indications. The case was that of a young girl who, through cold, had a sudden suppression of the menses. Chorea manifested itself immediately, in a most aggravated form. In addition to the shower-bath and cold douche, which are his "sheet anchors" in this complaint, in the view of the obvious cause of the malady, a vicarious flow was induced by leeches, a large number of which were applied. I saw the patient a few days after, when she was rapidly recovering.

Trousseau's favorite method of treating chorea is by the administration of the sulphate of strychnine, in the following manner:

R Su'ph. strychniæ, centigrammes, 5. } Cap. coch. mag. ter
Syrup. simpl., grammes, 100. Misce. } in die.

Dr. Nathaniel Miller, of Providence, Rhode Island, now in Paris, informs me that he has seen a case of aggravated chorea, which had completely resisted Trousseau's treatment--carried on until the peculiar poisonous effects of strychnine had become dangerously manifested, rapidly cured by the antimonial treatment.

Mons. Briquet has lately advocated the *electric treatment for lead cholic.* He has demonstrated, very conclusively, that the *seat of the disease is in the muscular parietes of the abdomen, and not in the intestine.* By his treatment the pain ceases after every *application* of the agent, leaving the patient comfortable for an hour or longer. In the meanwhile, the ordinary treatment, for the elimination of the lead, can be employed. During the *application* of the electricity, the pains are greatly increased, but soon subside. Becquerel does not adopt the plan, but relies on the usual treatment by sulphuric acid and evacuants.

In Becquerel's service there have not been lately any cases of extraordinary interest, with perhaps the exceptional instance of a patient having a patch of "bronze skin" upon the forehead. Upon examination after death (from another complaint) the supra-renal capsule of the right side was found enlarged and carcinomatous, thus, to a certain extent, verifying a theory on the subject.

In testing urine for albumen, Becquerel prefers the pyro-

phosphoric acid when a delicate test is required, this agent showing the presence of albumen, even when in as low proportion as one in ten thousand parts of urine. The pyro-phosphoric acid should be used within two hours after it is made, as, later than that, it takes up two other equivalents of water and becomes *ordinary* phosphoric acid.

A writer in the *Gazette des Hôpitaux* of December 15th, 1857, giving the results of the so called "purgative treatment" in the typhoid fever of children, as shown by the practice of M. Beau, makes use of the following strong language in opening his subject: "The purgative method, indubitably the best for the adult," (!) "should it be used in typhoid fever of infants (children)?" If the purgative method* *is* "indubitably the best for the adult" suffering from this disease (a theory which I think very few American physicians will admit), it is not relied upon by Becquerel, who prescribes but little for this disorder except good nursing; although, in rare cases, where there are severe local complications, he occasionally bleeds a little. Bouillaud, at the Charité, treats nearly all cases of this disease by bleeding.

The employment of mercury, in the Parisian hospitals, is almost entirely confined to its use as a cathartic, in which case very small doses of calomel are given, mixed usually in powdered white sugar. Except in the treatment of specific venereal diseases, the administration of mercury, to obtain its specific alterative effect, is almost entirely confined, in the hospitals of Paris, to the treatment of puerperal peritonitis and congestion of the liver.

A singular fact, noticed in the Parisian hospitals by a stranger, is that no means are attempted to isolate cases of the contagious eruptive fevers; these being placed indiscriminately throughout the wards. From what I can learn, these disorders are rarely communicated to the other patients; and as they are now considered very tractable, but little heed is given to them.

Several points in the general treatment in these hospitals are well worth noticing. Foremost is the prevalence of the "let alone treatment," unless there is a strong indication to the contrary. This seems to be particularly the case with Becquerel. In his service, also, whenever a patient is bled, the blood is analyzed; if more than the normal quantity of fibrine is found, the bleeding is repeated, and again, and again, if the superabundance of fibrine continues.

* The "purgative method" of Larroque is the one employed. It consists in the administration of an antimonial emetic at first; which is followed afterwards by salts, repeated continually *for three or four weeks*, in sufficient quantities to produce four or five evacuations daily!!

A short time ago, I witnessed Becquerel apply the actual cautery to several cases of ulcerations of the os uteri. The agency of the electrical cautery apparatus was employed; and I noticed that he took pains to connect the wires, and heat the metal of the cautery, *outside* of the vagina.

At first, when using the electrical cautery, he was in the habit of heating the iron near to, or directly upon the surface to which he was to apply it; but finding that even in the comparatively short time he had been thus using the agent, that two cases of metro-peritonitis had occurred, he deemed it best to employ the iron already made hot before the introduction into the vagina, in the same manner precisely that the common actual cautery is used.* The same physician, in ordinary vaginal examinations, makes use of the *tri-valve* speculum by preference.

In surgery I have seen but little new since writing my former article. In that paper I mentioned Maisonneuve's method of amputating with the *écraseur*, and stated that the object sought by this mode is to lessen the danger of phlebitis and "purulent absorption." Judging from the success following the removal of hemorrhoidal tumors, etc., by this instrument, and the comparative infrequency of phlebitis as a consequence, it was but fair to suppose that, in hospitals where all operations with the knife had been unsuccessful from that very cause, there must be something more than mere accident to occasion such a manifest difference where the écraseur is used. Thus far, Maisonneuve has amputated ten times in this manner, as follows:—2 arms, 2 forearms, 1 thigh, and 5 legs. Of this number there have been two deaths; but on a severely exact post-mortem examination, no traces of purulent absorption or phlebitis could be detected.

The case of amputation of the thigh formed one of the two fatal cases. It is a pity that, in the view of the experiment, instituted there was not a larger proportion of amputations of the *thigh*, for comparison and examination.

Since the means used at first for breaking the bones have been improved and altered, and brought to their present perfection, the stumps following the operation are very good.

The case of injection of iodine into the knee-joint, for the cure of chronic synovitis, reported by me heretofore, was considered *cured* twenty-eight days after the operation. Seve-

* A single case of metro-peritonitis had also occurred in a vast number of instances in which the common cautery had been used. Whether this was the *only* case that has occurred in Becquerel's wards, or the only case which has occurred during my informant's connection in Becquerel's service, I do not now remember.

ral similar operations have been performed in the different hospitals within the past two months; and I have heard of one case in which both knees were injected.

Chassaignac has recently amputated the neck of the os uteri with the écraseur. I witnessed two of these operations, which were readily performed, and accompanied by very little hemorrhage, perhaps not more than two teaspoonfuls each. The ultimate results of these cases I have not yet ascertained.

In connection with the above subject, is the fact here stated, that not a single case of "Cæsarian section" has ever been performed in Paris, without sacrificing *the mother*.

The treatment of fractures is so faulty in Paris, that, to do the subject justice, it would require more space and time than can be at present spared. For some years past, all attempts to apply the extension treatment to a fractured thigh, have been abandoned, for the reason that all the methods known to the French surgeons were liable, if extension be kept up, to be followed with sloughs of the ankle, instep, etc. The plan of making extension by adhesive plaster bands, and the "straight apparatus," until March, 1858, had not reached the "focus of medical knowledge," although it has been in successful practice for over seven years in the United States.*

---

* I wrote to New York for the apparatus in use in the New York Hospital. This was promptly sent me by Dr. D. C. Peters; and Dr. Buck very kindly forwarded me a letter, giving a brief synopsis of his success in thus treating sixty-one cases of fracture of the thigh, in which nineteen cases were cured with absolutely no shortening, and the other forty-two with the insignificant average shortening of but five-eighths of an inch. Prof. Nélaton, the first surgical clinical lecturer of Paris, and at present in charge of the surgical wards of the Hôpital de la Faculté, requested me to apply the apparatus to a patient in his wards, which I accordingly did, with great care, omitting not the smallest particular. Prof. Nélaton expressed himself well pleased with the idea of extension by the adhesive bands, as also with the apparent simplicity and efficiency of the improved straight apparatus shown; and regretted that he had no case of fracture of the thigh then under treatment in his wards, with which he could test the apparatus for himself. The patient upon whom the apparatus had been shown, unfortunately for us, not having a fractured femur, Prof. Nélaton requested me to furnish him with a translated copy of Dr. Buck's letter, which I accordingly did, and have also presented him with the complete apparatus, that he may use it for himself whenever he wishes. In speaking of the plan to Prof. Nélaton, I have called it the "American method," partly because I feel a national pride in the matter, and partly because, owing to the different modifications of the straight apparatus of Dessault, which are used in the hospitals of Philadelphia, New York, and Boston, I could only designate the permanent apparatus as the "American modification" of *Dessault's* splints, with the addition of the principle of adhesive plaster extension, the name of the original proposer of which I have forgotten. Dr. Nath. Miller, of Providence, Rhode Island, conjointly with myself, is having a similar apparatus made to be used in the wards of La Pitié, and afterwards to be sent to one of the principal London Hospitals, with the view of introducing the plan into that metropolis.

The treatment usually employed here for *ununited* fractures, is by the seton. Occasionally, however, cures have been effected by exsecting the ends of the fractured bones, and then dissecting up for a short distance, the periosteum from each fragment, and invaginating, as it were, the portions of the membrane towards each other.

Maisonneuve has now under treatment a case of recent fracture of the patella, which he is treating by a method original with him. He applies bands of adhesive plaster above and below the patella, in the form of a double "figure 8," encasing the whole limb afterwards in a stiff support of adhesive plaster, put on like ordinary "straps," but wider than those we use for strapping ulcers. The effect of this casing is much like that of the ordinary starched bandage, and, I think, scarcely more efficacious. The *whole* plan of the treatment strikes me as good, and I shall not be surprised if its results are favorable, and at least one step beyond the usual modes hitherto in use.

In Ricord's hospital, Hôpital du Midi, there are at present the usual number of afflicted. I learn, from the chef de clinique, M. Poisson, that since the last edition of Ricord's letters, a point has arisen to notice, which somewhat staggers the previous theories of that eminent specialist, concerning the convertibility or non-convertibility, of his two divisions of chancres; this is the fact, that chancres on the "face" (lips)? are *almost always* of the *hard* variety. To settle this point, a vast number of experiments would have to be instituted, which are precluded by the cruelty of submitting the subjects to such a risk, as well as the great danger of legal processes afterwards.

Ricord's treatment for indolent non-suppurating scrofulous buboes of the groin, is to touch the surface in points all over the enlarged gland, with a red hot iron—each point burnt being of about the size of a pea.

This is the same manner in which Maisonneuve uses the actual cautery for treating chronic strumous inflammation of the knee. He then applies pressure by means of a narrow india-rubber "roller bandage" neatly applied.

The latter surgeon, a short time ago, reduced a very large scrotal hernia by applying a similar bandage of india rubber.

At present, it is quite the fashion with the surgeons here to operate on fingers and toes which have had local anæsthesia produced by the freezing mixture. This is not new in the United States; but, perhaps, the hint thrown out by the Parisian experience, that the soft parts are very apt to suffer

afterwards, if the cold is applied for a period exceeding three minutes may be of use to some.

Some time ago, Nélaton reduced a dislocated shoulder by means of the ordinary pulleys, working on a sort of spring steel-yard, called, I think, a "dynamometer." This, on its dial-face, gave the exact amount of force employed. An ingenious instrument for suddenly letting go the rope, thus saving it from being cut, as in the ordinary manner, was also used. The working of both instruments was quite satisfactory.

Jobert de Lamballe, at the Hôtel Dieu, has operated this winter on a case of the so-called "loose cartilage" of the knee-joint. His operation was neat and successful to a degree. From a report of the case, as found in the *Gazette des Hôpitaux*, and as furnished me by Dr. Webster Lindsly, of Washington city, D. C., who watched the case while under treatment, I am enabled to give the following condensed summary of its leading features:

Operation for the extraction of a movable foreign body in the cavity of the knee-joint by Jobert (de Lamballe) at the Hôtel Dieu.—On the 18th of November last, Jobert attempted to dissipate a "movable cartilage," which had previously been ascertained to be lying loose in the cavity of the knee-joint. His first operation was intended to effect the object by the "bruising" method. Owing to the hardness of the body, this operation was unsuccessful.

Several days afterwards, when all the commotion produced by the attempt had disappeared, the operation for the complete removal of the foreign substance was commenced, by puncturing the integuments at a point about $1\frac{1}{2}$ inches above the outer side of the movable body. A very thin, sharp tenotomy knife was introduced into the wound thus made, and the instrument conducted subcutaneously to a point opposite the foreign body. The operator, then, by dexterously handling his knife, made a small concealed cavity, or receptacle, sufficiently large to allow the offending mass to be pushed into it. The cartilage being then pushed into this cell, the operation was stopped, and the wound closed by adhesive straps. The joint was kept in absolute quiet, and the usual antiphlogistic treatment adopted. Although, for some time thereafter, there was more or less of inflammation, pains, etc., in the joint, at the end of twenty-five days they had disappeared, and the patient was found in a completely satisfactory condition. Jobert then performed the second part of his operation, which consisted simply in cutting down upon the body, and removing it with forceps. The wound was then closed by two needle sutures. With ordinary

care and treatment the patient rapidly recovered, notwithstanding a slight erysipelatous blush which showed itself on the third day. The foreign body was the size of an almond, ovoid in shape, and flattened on two of its opposite sides.

The principal interesting feature of this case, and which tended so directly to its happy result, was the length of time which was allowed to elapse between the sequestration of the "movable body" and the period of its ultimate extraction. Jobert insists that the period of repose between the two steps of the operation, should be at least from twenty-five to thirty days.

The "Annales d'hygiène publique et de médecine légale" of January, 1858, contains a paper by Mons. Ambroise Tardieu, Physician to the Lariboisière Hospital, on the medico-legal bearings of the crime of "*pédérastie.*" His work contains a record of the alarming and frightful extent of this crime in Paris, as developed by the examinations of 205 individuals either actively or passively addicted to the vice, together with remarks upon its effects upon the health—its diagnostic signs, and its bearing as a contingent of other crimes.

Dr. Tardieu is the chief medical examiner to the police in cases where expert testimony is required concerning rapes, etc., and is also a man of sufficient standing in his profession to have been appointed visiting physician to the most new and beautiful hospital in Paris. The disgusting details through which he has had to wade in making this report, have been manfully met. Actuated by devotion to science, and a sense of duty, he has written a paper singular in the extreme, upon a crime happily almost unknown in America. I have mentioned the existence of this report, for the benefit of those pursuing medico-legal studies, and in the words of the reviewer of the work, my excuse is—"La science est comme le feu, elle purifie tout ce qu'elle touche."

Regulation diet of the Paris hospitals.—The following is the diet system of the Parisian hospitals: The aliments are divided into bouillons, potages, soupes (au pain), aliments solides (solid aliments), and boissons (or nutritious drinks)—namely, wine and milk.

The diet of a healthy man in his natural state, is assumed at about 1,350 grammes of solid food (about 42 ounces). This, *at first*, when the general diet of the hospital patients became systematized, was called *one* portion; patients confined to less, being ordered one-quarter, one-half, etc., of a portion.

It was found, however, that the sick were very much dissatisfied at eating *parts* of a portion. In consequence, the full portion was divided into four parts, each called *portions;* and

it was then found that the patients, who grumbled most lustily at being restricted to three-quarters of the old portion, were perfectly content with *three portions* of the new standard; although, in reality, the allowances were equal in weight.

There have been, however, several alterations in details; and the single portion as now used, although approximately in direct proportion to the old full portion, is still slightly varied. This is also the case with the others.

To give a correct notion of the shifting value of the different portions as now used, it is necessary to go into the following details. But I will premise by saying, that a patient, confined to what is called strictly *low diet*, is only allowed *broth* without bread, farina, or vegetables. The fixed daily amount of this article, is a quarter of a litre given twice—making in all a half litre per diem.*

A patient allowed a little higher diet, has two broths, and two soups a day. The soups contain a little bread or farina, rice, etc.—one *soup* contains a small trifle more than a quarter of a litre.

When one portion is prescribed, it contains: soup, twice a day, a quarter litre each time. Bread, a quarter kilogramme—about half a pound. Meat, six decagrammes—about two ounces. Wine, three portions, each containing about two and a-half ounces. This wine is light, red wine, coming from the middle of France. Milk, three-fifths of a litre daily, boiled. Note: The wine and milk may be exchanged for each other, at the patient's option.

Meat varies in quantity somewhat according to the number of portions, but not exactly. When one portion is ordered, the patient is supposed to be weak, and, therefore, meat of a better quality is ordered—such as roast beef, or fowl. The same quality is allowed when two portions of diet are ordered; but *two portions of diet* do not contain double the quantity of meat that *one* does; although a little more than this latter, being seven and a-half decagrammes (about two and a half ounces). Three portions of meat represent twelve decagrammes (about four ounces). Four portions, eighteen decagrammes (about six ounces); but the meat of the third and fourth portion allowance, is *boiled beef*. The usual amount of vegetables for one portion of diet, is fifteen decagrammes (say five ounces); but of the coarser kinds, as potatoes and cabbage, double weight is given.

With all the portions, there is a little boiled fruit or comfiture allowed.

---

* The litre is equal to gall. 0.22.

Fish is given twice a week in lieu of meat, and a little more by weight allowed than of meat. The regular proportion is kept up with everything, but meat and milk. The milk of the hospitals is contracted for by the general administration, and is supplied every day fresh and pure.

It is the duty of the chief apothecary of each hospital to analyze this milk daily—and also to examine it with the polarimeter (sugar deviating the rays of polarized light).

Four portions of diet complete, contain: soup, morning and evening; meat, six ounces a day; bread, a pound; wine, from twelve to fifteen ounces.

No milk (except by replacement); vegetables, twenty ounces, and more when potatoes, etc., are given.

Extras: chop, beefsteak, Bordeaux wine, eggs, chicken, etc., are allowed only upon a *special written prescription* of the attending physician. Eggs, however, are sometimes given in replacement of meat; say one egg to replace two ounces of meat. The rule of the hospitals is to give *meat* itself, at least four times a week.

Four portions are not often allowed in the hospitals of the city; as a patient, eating them, is supposed to be convalescent, and able to go to the hospital for convalescents at Vincennes.

A surgeon occasionally allows a patient five portions, but this is done very rarely.

The foregoing diet seems to be excellent and liberal for the usual run of *medical* patients; but it seems far too little to support those who are being rapidly weakened by excessive and long continued suppuration.

We, misguided Anglo-Saxons, think, that patients in this condition, crave and often require a much more considerable portion of food than men in a healthy state. This is to compensate for the drain of the suppuration. The stomach comes to the rescue of the poor suffering system. Should we not, they ask, put into this stomach what it demands? The building-up treatment of the English, or of our surgeons at home, casts far into the shade even the apparent prodigious allowance of five portions, by the French surgeons.

As an example of the contrary treatment in the United States, I would draw the attention of my readers to the case of a German who was under treatment in the New York Hospital, in the year 1851, for a severe compound fracture of the thigh. This man, although at one time fearfully emaciated, and, as the biographers say, on the "verge of dissolution," finally recovered, thanks to his stomach. The amount of suppuration from his various abscesses, bed-sores, and original

wound, must have been, for nearly eight weeks, at an average of at least a pint daily; but the stomach coming bravely to the rescue of the patient, and the doctors and nurses efficiently aiding the stomach—although the amount of eggs, chops, beef, milk, brandy, porter, wine, poultry, etc., consumed by the creature was enormous—he lived to walk out of the hospital with a good limb—cursing those that had attended him, because he was discharged before he was able to work!

PARIS, *March 27th*, 1858.

ART. IV.—*Report of the Post-mortem Appearances in Eleven Cases of Cholera Infantum.* By J. LEWIS SMITH, M.D., Physician to the Northwestern Dispensary, New York.

WITH the single exception of Asiatic cholera, there is no disease in our city that proves so destructive to human life, in so short a time, as the summer complaint of children. During the three warm months of the year, from one to two thousand are swept off by this scourge; and a large number stricken by it, after weeks of progressive emaciation, go to swell the list of deaths from marasmus. From the fact that this disease is so fatal, and that, though a constant summer epidemic, its nature is not fully ascertained, I am induced to furnish for publication the following records of cases taken from my note-book, kept at the Northwestern Dispensary during last summer. The post-mortem examinations throw some light on the seat of the disease, and will aid in settling the mooted point, whether or not it be an inflammation. It was necessary, in several of the cases, to inspect the viscera through small incisions in the abdominal walls, so that the solid organs could not be brought into view, but the intestines were carefully examined in all.

Case 1.—C. S., a female infant, 12 months old, nursing and having six teeth, was brought to the Dispensary on the 26th day of June, 1857. According to the mother's statement, the health of the child had been good till four days previously, when she was taken with vomiting and purging, and her dejections had numbered ten or twelve daily since. She was feverish, but not drowsy or in pain; tongue dry and covered with a brownish fur. An opiate was prescribed, but without relief, and death occurred on the following day.

Autopsy.—No appreciable emaciation; intestines distended with gas; mucous membrane of small intestines vascular in places, but not in a marked degree; there were larger vascular patches in the ascending colon, and the descending portion was uniformly and intensely injected; this last part of the intes-

tinal tract had almost as deep a color as that of mahogany. The other viscera were not examined.

Case 2.—E. M., a Dispensary patient, 14 months old, died of the summer complaint on the 5th day of July, 1857, after sickness also of five days. The ordinary symptoms of this disease were present, with the exception of vomiting.

Autopsy.—Body not emaciated; a little serum escaped on opening the abdomen. The small intestines did not present any notable alteration, with the exception of slight vascularity in places. The ascending colon was pretty uniformly injected; the descending was intensely red and thickened, presenting as well marked traces of inflammation as I have seen in the colon of the adult, after death from dysentery. The other organs were not examined.

Case 3.—M. L. H., seven weeks old, an almshouse child, was brought to the Dispensary on the first day of July, to be treated for diarrhœa of two weeks' continuance. The nurse who suckled him was suckling a child of her own, which also had diarrhœa. The almshouse child was placed on the compound powder of chalk and opium. *July 6th.* Is no better; dejections some days almost innumerable; eyes sunken. There is still no vomiting. *July 9th.* Death occurred to-day. The stools were frequent and without vomiting till near the close of life.

Autopsy.—The intestines examined externally, and the mesentery appeared more vascular than natural; the mucous membrane of the small intestines was injected in places; the entire tract of the large intestines presented greater vascularity than the jejunum and ileum, and in the descending portion the color was deepest and most uniform.

Case 4.—F., ten months old, died of cholera infantum on the second day of August, after about ten days' sickness. The dejections were green, and death occurred in convulsions.

Autopsy.—There was no appearance of disease in the stomach and small intestines, but the latter were, in places, considerably contracted; greenish feculent matter was lodged above the points of contraction; the ascending and transverse portions of the colon were slightly injected, but otherwise they presented the healthy appearance; the mucous membrane of the descending colon was much inflamed and ulcerated; the ulcers were generally circular, varying in size from a pin's head to a small pea; the mucous membrane was thickened and nearly of a mahogany color; the liver was perhaps more vascular than natural, but otherwise its appearance was not changed.

Case 5.—D. W. A., a foundling, nine months old, was brought up by a hired nurse since the age of three months. Though rather feeble, she continued to thrive on the ordinary diet of

spoon-fed children till the latter part of July, when she was taken with the summer complaint. The discharges continued frequent, and of a variable color—green or yellow—till the 12th day of August, when death occurred. During the last week of her life she had sprue, and was almost constantly moaning. The woman who had charge of this child stated, that four other foundlings had died on her hands during the summer. All had vomiting and purging; one was sick only two or three days.

Autopsy.—No record was made of the condition of the stomach; the liver, small intestines, and ascending portion of the colon did not present any notable alteration; the mucous membrane of the descending colon was thickened, ulcerated and vascular, especially around the ulcers; the descending colon was also considerably contracted.

Case 6.—R., a foundling, four months old, died of the summer complaint on the 20th day of August. According to the statement of the nurse, he had had his usual health till two weeks before his death, when diarrhœa, without vomiting, occurred, which was checked in about three days. A relapse took place four days before his death, the stools being green and slimy, and attended with vomiting. He seemed to be in pain towards the close of life.

Autopsy.—Liver and stomach apparently healthy; spleen very dark, and I think softer than natural; the small intestines presented the usual appearance, but the mucous membrane could be easily removed by the nail, and the Peyerian patches were quite distinct; the mucous membrane of the descending colon was quite vascular; the follicles were distinct, but no ulceration was noticed.

Case 7.—W. M., a foundling, 4½ months old, was brought to the Dispensary in the latter part of August. The nurse stated that he had always been delicate, but that his bowels had not been so loose as to attract attention till the middle of August, since which time he had had frequent green and watery evacuations, with occasional vomiting. Death occurred on the 28th day of August, after sickness of about two weeks. The stools were very frequent during the last three or four days of life.

Autopsy.—Stomach and small intestines apparently healthy; a considerable quantity of watery substance in the latter, so acid as to blacken the steel; ascending colon also healthy; the left portion of the transverse and the descending colon were much thickened and ulcerated; at the sigmoid flexure the disease gradually disappeared. The portion of the colon which showed the disease most strikingly seemed to be almost putres-

cent, tearing easily. The nurse stated that the stools were very offensive. The gall bladder contained a moderate amount of yellow bile, and there was no appreciable change in the appearance or condition of the liver.

Case 8.—M. McK., 12 months old, nursing, was brought to the Dispensary on the 17th day of August. The mother stated that the health of the child had been good till the first of August, when the summer complaint commenced, and that since the tenth, there had been occasional vomiting. She became more and more emaciated, and although the vomiting and purging were partially checked, death occurred on the first of September, preceded by convulsions.

Autopsy.—The stomach and liver were not brought into view; the jejunum presented a healthy appearance; the mucous membrane of the ileum was uniformly red, and was easily scraped off; the ascending and transverse portions of the colon were not examined; the mucous membrane of the descending portion was softened, of a deep uniform red color, and easily detached; in the sigmoid flexure and rectum the disease gradually became less apparent; the fecal substance in the small intestines was green, and presented an acid reaction.

Case 9.—On the 9th day of September, I made the post-mortem examination of a female German infant, who had died of the summer complaint, at the age of twenty months. Her bowels had been loose several weeks, but the complaint did not assume a serious form till ten days before her death. She presented well-marked febrile symptoms, and during the last forty-eight hours of her life the purging ceased, and she constantly rolled her head and moaned. She had little or no vomiting throughout her sickness.

Autopsy.—The opening in the abdominal walls was not sufficient to bring the liver into view; the stomach and the jejunum presented their usual healthy appearance; in the ileum there were patches of inflammation extending two or three inches; the ascending and descending portions of the colon presented a uniform red appearance; the traces of inflammation gradually disappeared in the sigmoid flexure.

Case 10.—M. M., 12 months old, having had the summer complaint nearly all summer, was taken much worse with purging and vomiting in the first week in September, and died September 18th.

Autopsy.—Stomach and jejunum healthy, or nearly so; patches of inflammation in the ileum; the whole extent of the colon was vascular, but the descending portion was most diseased; the mucous membrane of this part of the intestine was thickened, ulcerated, and in places intensely injected; the in-

flammation extended, with little diminution, as deeply into the pelvis as I could trace it.

Case 11.—B., aged 13 months, having had the bowel complaint, with occasional vomiting, nearly all summer, died quietly, in a state of great emaciation, on the 9th day of October.

Autopsy.—Limbs much attenuated; abdomen protuberant; jejunum apparently healthy; ileum inflamed and slightly ulcerated; ascending and descending portions of the colon also inflamed and ulcerated, the former as much as the latter; bloody mucus could be scraped from the mucous membrane with the back of the knife. The stomach and liver were not examined.

The following is a *résumé* of the post-mortem appearances:

Stomach.—In six cases not examined; in the remaining five it seemed healthy. This fact is the more interesting when we consider that some eminent writers have asserted that the stomach presents the lesions of inflammation, and recollect that one prominent and obstinate symptom is referable to this organ. I find, however, from my notes, that vomiting was not present during the period of treatment at the Dispensary in forty-six patients out of an aggregate of one hundred and thirty-three; and in only twenty-four of those who suffered from it did it occur at the commencement of the disease.

Small intestines.—In three cases these appeared natural; in four they were moderately or slightly injected in places; in the remaining four the records state that the jejunum seemed healthy, but the ileum was more or less inflamed; continuously so in only one.

Ascending colon.—In two cases it was not examined; in two it presented the usual healthy appearance; in five it was vascular in patches, and in the remaining two it was uniformly injected.

Descending colon.—This, in all the cases, was the principal seat of the inflammation, presenting a continued red surface. In four cases, the records state that the mucous membrane was thickened; it may have been in others. Follicular ulceration was present in five cases. In two or three instances, on tracing the intestine into the pelvis, it was noticed that the signs of inflammation gradually faded.

Liver.—This organ was inspected in only four of the examinations; in three of these it is stated that there was no appreciable alteration in its condition; in the other case it was also natural, unless congested.

We may instance the following particulars, in reference to these cases, as especially important:

1st. That the stomach, though so irritable in the disease, and the liver, in the few instances in which it was examined,

did not present any notable alteration from the healthy state.

2d. That in all the cases there was well-marked intestinal inflammation. Two died when only five days sick, and yet in both the descending colon presented the inflammatory lesion in a high degree.

3d. That the inflammation was not confined to the mucous follicles, as it has been stated to be by some writers; but it extended in patches over the mucous surface.

4th. The portion of the intestinal tract in which the inflammation was most intense, was in all the patients the descending colon, and colitis was the only lesion invariably present.

ART. V.—*Obstetrical and Medical Cases.* By GEORGE T. ELLIOT, Jr., M.D. Physician to Bellevue Hospital; the Nursery and Child's Hospital; and the Lying-in Asylum.

Hysterical convulsions and hemiplegia.—Hannah ——— was brought into the surgical ward of Bellevue Hospital, March 4th, 1858, where Dr. J. J. Campbell, the house-surgeon requested me to visit her, and she was transferred to my service. Dr. J. R. Buist, house-physician. When I saw her she lay in an exhausted condition, apparently unconscious, but capable of being roused, and of answering questions. She was unmarried, well formed, healthy looking, had no menstrual irregularity, last period having occurred on Feb. 1st. For two weeks she had been troubled with severe pain in the head, circumscribed to a spot about two inches square over the right fronto-parietal suture, for which she had sought relief in constant cold lotions. At the end of this time, she complained to her friends of a numbness and weakness in the left hand, extending up the arm. Three days before admission she was seized, after retiring, with a strong epileptiform fit—both sides affected—foaming at the mouth—tongue not bitten. When this had ceased, her left side remained paralyzed. She declared then, and subsequently, that she was unconscious from this period until her admission. It is certain, however, that the convulsions had continued, and that the left side was chiefly affected in the attacks. Presently, while I was watching her, she had a well marked convulsion, without protrusion of the tongue, great suffusion of the face, stertor, loss of consciousness, or foaming at mouth. The character of the convulsion was hysterical. Chest normal, bowels confined, urine normal. No signs of paralysis about face, tongue protruded in a straight line, sensibility of left side unimpaired, though loss of motion, apparently absolute except during the convulsion. Pulse 56, with well marked intermission

every 4th or 5th beat; resp. slow. These convulsions were very numerous indeed. On the following day, a drop of croton oil was given, by Dr. Buist, in half an ounce of castor oil, and a blister applied to the nucha. On the 6th, as there had been no action from the bowels, an ounce of epsom salts, followed by a warm enema, was given without relief. In the evening she was passing her urine involuntarily. I ordered one drop of croton oil and four grains each of calomel, and podophylline, which brought away several dark and offensive stools the next day.

At this time the diagnosis was obscure—her condition was such—convulsions constantly recurring, hemiplegia perfect, strength feeble, and expression bad—that it seemed inhuman to dwell upon hysteria, though the convulsions, which I had frequent opportunities of showing to the class, were uniformly of the character described. Under these circumstances, I requested Dr. Clark to visit her, who thought, with me, that time was a necessary element in the diagnosis. After evacuation of the bowels, the pulse had risen to 80, and the convulsions became less frequent, and in the evening she seemed better, and more rational. Four leeches were applied over the painful spot elsewhere described. 15th. She has remained pretty much in the same condition. Control over the bladder now regained—convulsions no longer affect the right side—voluntary motion of the leg has been regained, and she is now able to raise her left arm. Suspicions of hysteria much strengthened, ordered one grain of the valerianate of iron three times a day. 19th. Has improved so rapidly that she can now walk the ward without assistance. Since this time she has continued to improve, and is doing well.

Acute articular rheumatism—Double pneumonia and pericarditis.—Dr. Buist, house-physician; Dr. E. W. Lambert, senior-assistant.—Ellen McGill, English; single; aged 17; hearty-looking girl; admitted March 5th, 1858. No hereditary predisposition. On the night of February 18th, she slept for some hours on the floor of a cold room, and awoke much chilled. On the following day there was such acute pain in her wrists and knees that she could not rise, and continued in bed for several days. Though not improving, her mother made her sit up in a cold room; and a few days after, her father, while drunk, drove her out in the snow, where she remained several hours. All her previous symptoms became much aggravated; in addition, she was attacked with severe pain in her right side. When admitted, she was suffering with pains in her joints and chest, the latter not localized. Respiration hurried and difficult; face flushed; skin dry and hot; tongue moist, clean, but slightly fissured. Pulse 130, full and

of good strength. Wrists slightly swelled; legs œdematous. No expectoration, but a slight hacking, persistent cough.

Physical signs.—Dullness commenced at the upper margin of the third rib, on the left side anteriorly, and posteriorly about two inches below the spine of the scapula, extending to the base of the lung. Over this entire surface there was well-marked bronchial breathing. Pneumonic crepitation best heard anteriorly over the third and fourth ribs, right lung. Dullness and pneumonic crepitation in the axilla and over the third or fourth ribs. Respiration otherwise normal. Heart sounds seemed natural, but very indistinct. Oiled silk jacket, twenty dry cups to left side.

℞ Ant. et Potassæ Tart. . . gr. j.
Solut. Morph. Sulph. (U. S.) ʒj.
Sodæ et Potassæ Tart. . . ʒjss.
Aquæ . . . . . ʒviij.
M. Tablespoonful every two hours.

10 P.M. Resp. much easier; pulse 120; profuse perspiration; incessant cough, but no expectoration. Face much inclined to lividity.

March 6th.—11 A.M. Resp. 40, pulse 120. Face much flushed; rheumatism much better. Dullness anteriorly extends to within two inches of the clavicle; slight roughness with first sound of the heart heard over the third rib, near the sternum. Sixteen dry cups to left apex. 12.30 P. M. No marked change. 6 P.M. Resp. 40, pulse 128. No other change. Tr. verat. viride gtt. xv. every three hours. Ten dry cups to the kidneys. 8.30 P.M. Resp. 40, pulse 124; slight pneumonic expectoration. 10 P.M. Resp. 40, pulse 120; otherwise the same. *Midnight.* Resp. 40, pulse 116; somewhat nauseated.

7th.—8.30 A.M. Resp. 52, pulse 108. Has vomited. Tr. verat. viride discontinued. 8.50 A.M. Resp. 45, pulse 120; constant cough; no expectoration; skin moist, tongue ditto. 11 A.M. Resp. 56, pulse 120. 1.50 P.M. Resp. 48, pulse 98. Vomited her dinner. All medicine stopped. 6 P.M. Resp. 56, pulse 112; skin very moist, tongue slightly dry. No vomiting since last visit. 8.50 P.M. Resp. 48, pulse 116. Short cough, with no expectoration. Pain and tenderness in right knee, with some effusion; slight ditto in left knee. Auscultation of the heart gave a loud, rasping, double-friction murmur over the second and third left ribs, for a space of about two square inches, at the same spot where the slight roughness was noticed yesterday morning. Murmur very superficial, and not transmitted along the great vessels. Heart's apex not recognizable,

but evidently pressed up. Skin very moist; tongue dry. Medicine renewed. 11 P.M. No change. Resp. 52, pulse 120. Blister 4 × 4 over base of heart.

8*th.*—6.30 A.M. Patient very comfortable. Resp. 44, pulse 108. Skin very moist; tongue slightly dry in the centre; countenance with better expression. 9 A.M. Resp. 48, pulse 112. 1.30 P.M. The patients in her ward have been transferred up a flight of stairs into a new and cold ward. Resp. 56, pulse 120. Countenance very anxious. 5 P.M. Resp. 48, pulse 108. Sleeping. Dullness over præcordial region much diminished. Friction sounds have altered in tone. Diastolic very indistinct. Tinct. verat. vir. every two hours, with sal Rochelle.

9*th.*—6 A.M. Resp. 40, pulse 124. Has continued to sleep during the night. Expectorates a muco-purulent viscid matter. 9 A.M. Resp. 48, pulse 116. General condition good. Dullness over præcordial region much diminished, confined to left of median line, and from the third rib downwards. Apex distinct, under the nipple, four and a half inches from the median line. In the recumbent position the friction sound is only heard with the systole; indistinctly double in the erect posture. A sub-crepitant râle adjoins the apex. Posteriorly, bronchial breathing and crepitation over the left lung. Over right, normal. Continue medicine. Ordered wine. 6 P.M. No change. Resp. 52, pulse 120. Ten leeches to cardiac region, which bled freely for three hours, when the orifices were closed with mati, and kino, and pressure. 10 P.M. Twelve grains of Dover's powder.

10*th.*—8 A.M. General condition good. Slept some during the night. Resp. 48, pulse 116. Tongue moist. 6 P.M. Sits up in bed. Cough troublesome. Expectoration as before. Friction sound with systole, but over a limited space over the base of the heart. Tr. veratrum viride stopped.

11*th.*—Resp. 48, pulse 116. Improving.

12*th.*—Resp. 40, pulse 120. Friction sound ceased. Patient very self-willed; rises from her bed to walk over the ward at night.

13*th.*—Resp. 40, pulse 124. Sweating freely. Joints still affected. Vinum colch. sem. combined with sal Rochelle.

14*th.*—Febrile action still considerable. Wrists and knees still painful. Continues to leave her bed at night.

15*th.*—Fever still quite active; pulse 128. Skin hot; tongue moist; much pain in the joints. Murmur heard at the apex with the systole.

18*th.*—No improvement seeming to follow the alkaline treatment, the patient received ℥ss. of lemon juice every three hours, at Dr. Elliot's suggestion.

19*th.*—Face less flushed; febrile action continues; pulse 128. Rheumatic pains somewhat relieved.

22*d.*—Expectoration purulent, viscid, and very abundant.

23*d.*—Expectoration the same. Over left side posteriorly there was dullness at lower angle of scapula, bronchial breathing, and broncophony very distinct. Subcrepitant and crepitant râles extending to base of lung.

25*th.*—The above signs of pneumonia have entirely disappeared. Fever also much less. Pulse 120.

27*th.*—Patient improving. Pneumonia gone; mitral murmur very distinct. Evidences of slight hypertrophy of heart.

April 10*th.*—Patient walking about, and, excepting occasional attacks of angina pectoris, very comfortable.

21*st.*—Nothing new to add.*

Uncontrollable vomiting in pregnancy—Exhaustion—Induction of premature labor with the douche—Death—Autopsy.—The following notes were taken by Drs. E. W. Lambert and N. Barrow, senior-assistants.

Ellen McGowan; aged 32; Irish; married; ninth pregnancy; has never miscarried, and has had easy and good labors. About January 1st, 1858, was first taken with nausea and vomiting, which became persistent. For three weeks the material vomited was bitter, and often green; afterwards not bitter. Always constipated; bowels only moving after the administration of medicines.

Bismuth, lime water, hydrocyanic acid, bicarbonate of soda, chloroform internally, creasote, hyposulphite of soda, blisters to epigastrium, simple, and sprinkled over with morphia, and many other remedies were tried with little or no effect. Supporting treatment was resorted to by the mouth and by the rectum, but she steadily lost ground from the date of her admission. Feb. 13th a consultation was called, and a second on the 15th, in both of which Dr. Elliot's desire to induce premature labor was not supported. On the evening of the 16th Dr. Metcalfe sanctioned the operation, and she was transferred to the lying-in ward at half-past nine, P.M. She was then in a very critical condition, almost exhausted; but refused to be carried, and walked between two assistants. She sat in a chair several minutes without being noticed, as three other deliveries were going on at that immediate time. Pulse 104, small and feeble. On vaginal examination the os uteri was found quite patulous, head low down and movable; plenty of liquor amnii. Fœtal heart distinct. 10.45 P.M., a warm douche of

* Since writing the above, Ellen had a severe attack of angina pectoris, and died. No post mortem obtained.

one and a half gallon played against and within the uterine orifice, and patient immediately covered up warm in bed. Two tablespoonfuls of iced champagne were given, and immediately rejected. Feb. 17th, 3 A.M.—Several warm douches, followed by hot-air bath, as she complained of chilliness. 7 A.M. Pulse 94, and of the same character. Patient has refused the champagne, asked for tea, and occasionally for water. Fœtal heart not now perceptible. 9 A.M. Dr. Elliot's visit. Pains are commencing, regular and of some force. Uterine action commenced before the patient was aware of it, and when told of the fact, denied that she had any pains. At 10.20 the membranes were ruptured. Fœtal heart again heard. Child born, living, at 2.45 P.M., apparently between seven and eight months, small and puny. Injections of brandy and the wine of ergot given. Uterus contracted well. At 4 P.M., the placenta remaining wholly within the uterus, Dr. Elliot introduced his hand and found it entirely adherent to the anterior wall. No hour-glass or irregular contraction. Removed with some difficulty, but without hemorrhage. Endeavored to give her milk in small quantities, which she relished, but continued to sink, and died a little after midnight; the infant having died just before. Intelligence uninterruptedly clear; vomiting never having been checked. *Autopsy* by Dr. Lambert thirty hours after death. Head not examined.

Chest.—Right lung healthy, with a small cicatrix at the apex. Left lung everywhere adherent from old pleurisy, at apex a few unsoftened tubercles. Heart healthy.

Abdomen.—No peritonitis; stomach contained no fluid. Mucous membrane has a slight greenish yellow tinge, and somewhat mammillated. No softening, except in greater cul de sac; no traces of inflammation. Spleen natural in color, size, and consistence; liver of normal size and color. General and marked softening; posterior and under surface of a semi-fluid and pultaceous consistence. In attempting to remove the organ the fingers would sink their entire length upon the slightest pressure. Gall-bladder natural. Kidneys pale, flabby and soft. Secreting portion apparently normal. Uterus well contracted, but the tissue easily lacerated. Cavity contained a few small coagula. No signs of inflammation. The miscroscope showed that the liver cells contained no unusual amount of fat; some cells were partially disintegrated, and free granular matter was very abundant. Some kidney cells somewhat granular.

Puerperal mania.—Dr. J. R. Buist, house-physician.—Mary Young, German; unmarried, aged 24; primipara; entered Bellevue Hospital Sept. 9th, 1857. Nothing worthy of note in

her mental or bodily state until her confinement on the 9th of October, when she had a natural and speedy labor. 14th.—Visited by the child's father, with whom she had a violent quarrel, greatly exciting her, and in which she used the most violent and profane language, and could only be quieted by persuasion and threats. During the two following days she remained anxious and agitated, and talked much to any and every one. Expression staring and unnaturally animated; at one moment sorrowful, and then displaying silly levity; voice unnaturally shrill. Complained of extreme abdominal tenderness and great dysuria, craving relief though the bladder was empty. Resp. hurried, pulse 130, and weak. Bowels confined. Ol. ric. and haust. anod. 20th.—Has uniformly declared herself well, but would stop all passers-by with accounts of herself and her troubles. To-day she has been disorderly, and has accused the nurse of poisoning her. When approached by Dr. Buist she became greatly excited, sprang up in bed, talking volubly, with much gesticulation, and accusing him of endeavoring to destroy her with ʒij. of morphia. Spoke of her infant with much affection. At 9, P.M., stole up to the rooms of the house staff and shouted the most abusive epithets, so as to alarm the patients in neighboring wards, and had to be forcibly carried to the cells, when it was thought best to separate the child from her, as she had been seen stuffing it between the bed and the wall. 22d.—Visited by Dr. Clark and myself. She was now calm, collected, talked rationally about herself, though she spoke continuously and hurriedly as long as her strength would permit, with an occasional silly expression. Some urine being drawn with the catheter gave no evidences of albumen. Bowels constipated. Hyd. chlor. mit. gr. v. and followed by oil, produced several copious stools, dark colored and very offensive. After this, large doses of the Tr. of hyoscyamus and Hoffman's anodyne failed to procure sleep. 23d.—Became violently delirious during the night. Broke every glass in the window; tore up all her bedding and clothing; cursed and swore; sung and talked incessantly, awhile in German and then in English; and finally had to be confined to the bed with belt and handcuffs. This delirium continued during the 24th and 25th, raving about the man with whom she had lived and her child; that she had just come down from heaven, was expected back immediately; snatches of songs; and again would refuse to keep her bed as she there saw an old man who would kill her. On the 24th the calomel was repeated, with an injection of opium, assafœtida and camphor. Beef-tea and milk-punch. In the erect posture, pulse 140; lying down, 114. Voice very hoarse. Constantly trying

to spit a scanty, tenacious saliva. 26th.—Calm and quiet; had willingly taken an egg and other nourishment. Pulse, 116. Still wandering and incoherent in conversation. Morph. sulph. gr. j. an hour for four hours, without producing sleep, though the pupils became much contracted. 9th.—Has slept during the night; but as wild and delirious as ever this morning. Obscenity and profanity; self gratulation; revenge, hatred, and affection were uttered by her indiscriminately and incessantly. 9 A.M. pulse 140. At this time I desired Dr. Buist to give her gtt. iv. of the dilute hydrocyanic acid every four hours, which she took (if my memory serves me correctly) during at least thirty-six hours. At one time, by accident, gtt. viij. were given without ill effects. Its effect as an arterial sedative was well shown, for at 1 P.M. the pulse fell to 120, and at 5 P.M. to 80. 30th.—Quieter, and in all respects improving. No farther treatment. From this date to Nov. 14th, she grew steadily better, having only occasional fits of delirium, and at that date needed no restraint. Dec. 12th.—She again became delirious, and almost as unmanageable as ever. And a month elapsing without improvement, she was transferred to the lunatic asylum.

This is the third case of puerperal mania in which I have made the urine the subject of careful examination, without in any one instance detecting albumen, or other deviation from the standard of health. The two other cases recovered nicely, though convalescence was somewhat protracted in one.

The following cases of puerperal fever occurred in Bellevue Hospital during the month of February, 1858, and were carefully recorded by Dr. R. C. McEwen, house-physician, and Dr. S. R. Forman, senior-assistant, who also made the minute record of puerperal convulsions in the case of Mary Connors, published in the present collection.

It is interesting to note that I have never seen erysipelas so prevalent in the hospital, since my connection with it, as in the months of February and March. One little neonatus, in the lying-in ward, was attacked with erysipelas of the face, spreading to the trunk, and terminating in perfect recovery.

Forceps—Puerperal fever—Death—No autopsy.—Rose Swift, native of Ireland, aged 22, domestic. Came into the hospital in labor, Feb. 9th, and, after a labor of 36 hours' duration, was delivered by forceps of a living, healthy child. The head was retained before completion of its descent by excessive flexion. Dr. Barker was called in consultation, chloroform given, and the forceps were applied by Dr. G. T. Elliot, and the delivery completed at 9 A.M. Feb. 10th.—Patient's pulse, before delivery, was 96; at 12 M., she was transferred to ward 10.

FEB. 10th.	Pulse.	Respiration.	S. Morphiæ.	Tr. Ver. Viride.	SYMPTOMS AND RESULTS.
			Gr.	Gtts.	
12 M.			¼		
12.30 P.M.	100		¼		Pulse very quick.
1.30 "	120		¼		Slept a little.
2.45 "	120		¼		Awake.
4 "	120	22	¼		
5 "	120	20	¼		Pupils slightly contracted.
6 "	120	22			Sleeping, itching of nose, some tympanites.
7 "	128	22	⅜		Sleeping.
9 "	136	20	⅜		Slept soundly during the hour.
10 "	142	22		10	Tympanites increased.
11 "	140	19		10	Sleeping.
12 "	124	18	¼	10	Awake. Pupils contracted. Tongue somewhat dry.
Feb. 11th,					
1 A.M.	136	19	¼	10	Sleeping. Tympanites increasing. Pain in a small spot in the left iliac region. Tongue moist and slightly furred. Skin natural. Pulse full and quick.
2 "	132	21	¼	10	Asleep.
3 "	136	17		10	Tympanites increased—no pain—no tenderness.
4 "	126	16	¼	10	
5 "	132	20	¼	10	Sleeping.
6 "	144	19	¼	10	Tongue red in middle—no pain or tenderness. Tympanitic.
8 "	124	12			Respiration catching. Pupils well contracted.
9 "	124	12			Pulse weak. Brandy ½ oz. every two hours—eggs and milk.
10 "	140	17	⅜		
12 M.	132	16			
1 P.M.	134	20	¼	10	Tongue moist.
2 "	136	18	¼	11	Tympanites increased—Lochia offensive—ordered vaginal injection of Sal Labarraque 1 dr. to Oj. warm water every four hours—turpentine stupe over whole abdomen.
4 "	144			6	A saturated tincture of veratum viride was now used.
5 "	132	16			Had vaginal injection.
6 "	130	18	¼	9	Turpentine stupe to abdomen.
7 "	130	20	¼	12	Tongue dry—Tympanites same—Tenderness on pressure.
8 "	136	20	⅜	15	Tongue moist—Skin hot and pungent.
9 "	102	22			Pulse becoming feeble and irregular—Jactitation—Vomited—Another vaginal injection and turpentine stupe. Stimulants used freely.
10 "	108	18			Pulse scarcely perceptible—Jactitation—Pupils contracted.
11 "					Pulse still very feeble—Jactitation extreme—Respiration labored—Tympanites diminished—Continued to sink, and died at 1.30 A.M. Feb. 12th.—No Autopsy.

Puerperal fever—Recovery.—Ann O'Neil, native of Ireland, aged 28. Labor began Feb. 6th, at 7 P.M.; waters broke at 9.45 P.M.; delivered of a boy at 10 P.M.; presentation, L.O.A. On the evening of the 8th, patient had a chill, at 12 P.M.

Feb. 9th.—Pain and tenderness in the hypogastric region. Lochial discharge dark; tongue coated. Some tympanites. A turpentine stupe was applied to the abdomen during the night. In the morning, a blister 3×4 was applied to the right iliac region; dressed with mercurial ointment.

Feb. 10th.—Pulse 96, and full; tongue coated; complains of pain in abdomen, on coughing. Lochia still continue. Tympanitic; countenance pale; skin cool; milk plentiful.

Feb. 10th.	Pulse.	Respiration.	S. Morphiæ.	SYMPTOMS AND RESULTS.
			Gr.	
12 M.	104		¼	
1 P.M.	104		⅛	
2 "	104		¼	
3 "	104	25	¼	
4 "	100	26	¼	Pupils slightly contracted—Itching of nose.
5 "	100	22	¼	
6 "	78	16		
8 "	88	13		Sleeping.
9 "	84	11		
10 "	88	11		
11 "	88	10		
12 "	83	12		Perspiring freely.
Feb. 11th.				
1 A.M.	82	11		
2 "	86	11		
3 "	78	9		Respiration irregular—Perspiring.
4 "	78	15		
5 "	72	16		
6 "	72	18		
7 "	64	19		No tympanites—no pain or tenderness.
8 "	96	18		
9.30 "	96	20		Transferred to Ward 32.

Scarcely any febrile excitement the day after being transferred. Free from pain or tenderness; tongue natural. Lochia suppressed; slight tympanites; milk still secreted. Feb. 17th.—Has had slow, but uninterrupted convalescence.

Puerperal fever—Recovery.—Catharine Butler, native of Ireland, aged 23, married. Labor began at 12 P.M., Feb. 5th. Delivered, after an easy labor, at 12.45 A.M., Feb. 6th. Presentation L.O.A. The membranes were somewhat adherent.

Milk and lochia were normal, and the general condition of the patient good, until the 9th, when she was found with tympanites and localized tenderness. Pulse quick, but not frequent. Ordered blister 3 × 4, and dressing of mercurial ointment. Feb. 10th.—Passed a pretty comfortable night. Tympanites and tenderness somewhat increased.

Feb. 10th.	Pulse.	Respiration.	S. Morphiæ.	SYMPTOMS AND RESULTS.
6 P.M.	96	23	Gr.	
8.15 "	88	23		Comfortable.
9 "	84	22	¼	
10 "	96	20		
11 "	82	15	⅛	
12 "	96		⅛	
Feb. 11th.				
1 A.M.	96	18	¼	
2 "	90	19	¼	
3 "	96	20	¼	
4 "	102	20	¼	
5 "	94	15	¼	
6 "	108			Respiration irregular.
7 "	104	18		Has not passed water during the day—Little tenderness—Tympanitic.
8 "	128		⅜	Tongue furred—Respiration frequent and irregular.
9.¾ "	90	16		Passed water on application of warm cloths—Lochia profuse—Bowels moved yesterday. Transferred to Ward 32.

Feb. 11th.—Pulse 104; some heat of skin; slight tympanites; some tenderness. Nervousness and depression of spirits. Complains of headache; no appetite. A day or two after, much better, though milk and lochia were suppressed. About the 14th, complained of want of sleep, headache, and malaise. Pulse 130. Pills of assafœtida and belladonna. Feb. 17th.—Convalescing; improvement continued, and on the 19th was sitting up.

Puerperal fever—Recovery.—Mary McGuire, domestic, native of Ireland, aged 28. Primipara. Delivered of an eight months' child, Feb. 11th, at 6.30 A.M. Patient did well until morning of Friday, Feb. 12th. At 8 A.M., had a chill. Lochia ceased; marked tenderness in the right iliac region. Abdomen tympanitic. Slight secretion of milk. Blister 3 × 4 and mercurial ointment. 6 P.M.—Tongue coated. Tenderness in right iliac region more marked and extended over the uterus. Lochia returned, after application of warm cloth to vulva. Respiration hurried; face flushed. Bowels moved by ol. ricini, ʒj. Pulse 132. At 7 P.M., took ¼ gr. morphine; again, at 7.30. At 8 P.M.,

$\frac{1}{4}$ gr.; dozing. 10.30.—Pulse 130; resp. 27; gr. $\frac{1}{4}$, sleeping. Perspiring freely; complains of nausea. 11 P.M.—Pulse 120; resp. 26.

FEB. 13th.		Pulse.	Respiration.	S. Morphiæ.	Tr. Ver. Viride.	SYMPTOMS AND RESULTS.
				Gr.		
1	A.M.	112	20	$\frac{1}{4}$		Sleeping—decubitus dorsal—knees drawn up.
2	"	112	20	$\frac{1}{4}$		Tympanites increasing—pain and tenderness in the left iliac region.
3	"	112	20			
4	"	118	18	$\frac{1}{4}$		Passed catheter, and drew off 16 oz. of high-colored urine—Thin watery discharges from bowels—Vulva, hot and dry—Pupils contracted.
5	"	126	20	$\frac{1}{4}$		Sleeping quietly.
6	"	120	19	$\frac{1}{4}$		Tongue dry—Complains of thirst.
7	"	120	20	$\frac{1}{4}$		
8	"	116	16	$\frac{1}{4}$		
9	"	120	16			
10	"	120	20			Lochia natural—Tenderness over uterus marked. Slight secretion of milk—Tympanites still marked.
11	"	120	16			Bowels moving—Frequent, thin, watery discharges.
2	P.M.	112	14			
3	"	120	12			Suppos. opii (gr. 2), ordered for bowels, had been given by mouth.
4	"	112	12			Skin hot and dry—Free from pain.
5.30	"	108	18			Bowels not so loose—Lochia continue.
6.30	"	112	17			
8	"	102	20			
9	"	112	20			
10	"	114	19	$\frac{1}{4}$		Skin hot and dry—Urine drawn again, 20 oz.
11	"	108	20	$\frac{1}{4}$		Tympanites less—Bowels quiet—Pain in right iliac region.
12	M.	124	20	$\frac{1}{4}$		
Feb. 14th.						
1	A.M.	110	20	$\frac{1}{8}$		Bowels still moving—Suppositories continued.
3	"	102	18	$\frac{1}{4}$		
4	"	108	14			Sleeping.
5	"	110	20	$\frac{1}{8}$		
6	"	110	18			Tongue dry.
8	"	110	16			Bowels moving.
9	"	108	22	$\frac{1}{8}$		Some tympanites and tenderness—Lochia dark, and not very offensive.
10	"	112	24	$\frac{1}{4}$		Pupils not much contracted.
11	"	120	22	$\frac{1}{4}$		Suppository again.
12	M.	126	18			
1	P.M.	126	18	$\frac{1}{4}$		Perspiring—Tympanites and tenderness the same—Bowels more quiet.
2	"	108	18	$\frac{1}{4}$		

FEB. 14th.	Pulse.	Respiration.	S. Morphiæ.	Tr. Ver. Viride.	SYMPTOMS AND RESULTS.
			Gr.	Gtts.	
3 P.M.	114	16	¼		Respiration irregular—Pain in hypogastric region.
4 "	116	16	¼		
5 "	120	18	⅛		
6.30 "	112	15	¼		
7.30 "	110	20			Respiration irregular—Suppository.
9 "	114	17			Tongue very dry.
10 "	108	18	⅛		
11 "	116	15			
12.30 "	116	17	⅛		Skin hot and dry.
Feb. 15th.					
1.30 A.M.	110	14	¼		
2.30 "	108	14	⅛		
4 "	120	20	¼		
5 "	120	18			
7 "	112	16			
9 "	102	12			Feels no pain—Tympanites the same.
11 "	90	15			Tongue moist, furred, and white.
12 M.	108	15	¼		
2.30 P.M.	114	19	¼		
4 "	114	21	¼		
5 "	112	18	¼		
7.30 "	120	16			
9 "	112	16	¼		
10.30 "	120	10	¼	10	
11.30 "	114	20	¼	10	
12.30 "	104	20	⅛	10	Tongue moist—Skin moist.
Feb. 16th.					
1.30 A.M.	106	22	¼	10	
2.30 "	100	22	¼	10	
5 "	100	16	¼	10	
7.30 "	90	13		10	Tympanites—Pain and tenderness less.
9.30 "	88	17			Sleeping—Pulse fuller.
11 "	82	22			
12 M.	102	30	¼	5	
1.30 P.M.	102	30	¼		Urine again drawn.
3 "	100	22			
4.30 "	94	16	⅛		Skin hot and dry—Pulse full and strong.
6 "	108	24	¼	15	Perspiring freely.
8.15 "	94	20	¼	10	Talking in her sleep—Pupils not contracted.
9 "	104	22	¼	15	
10 "	112	24	¼	15	
11 "	104	18	¼	15	
Feb. 17th.					
1 A.M.	96	18	¼	10	
3.30 "	72	14			
4 "					Asleep.
5 "	70	18			Comfortable.
6 "	66	17			

FEB. 17th.	Pulse.	Respiration.	S. Morphiæ.	Tr. Ver. Viride.	SYMPTOMS AND RESULTS.
			Gr.	Gtts.	
7 A.M.	62	20			
8 "	66	18			
9 "	76				Slight pain on moving—Feels weak—Lochia ceased.
10.30 "	100	15	¼	10	
11.30 "	92	24	¼	5	
2 P.M.	90	24			
3 "	96	24			
4.30 "	96	18	¼		Urine again drawn, 12 oz.
6 "	102		¼		Respiration hurried.
8.20 "	90	24			Skin moist.

Patient continued from this time to improve. Diet of beef tea, farina, rice and milk during sickness. March 11th.—Looking well—sitting up.

Puerperal fever—Death and Autopsy.—Briget Craven, native of Ireland, domestic, aged 23, primipara, was delivered of a healthy child, Feb. 10th, after an easy and natural labor. Was doing well until about 9 P.M., Feb. 13th, when she was attacked with rigors. Her pulse, which previously had been about 92, began to increase in frequency. There was no pain or tenderness, and but slight tympanites. No cessation of lochia; milk secreted.

FEB. 13th.	Pulse.	Respiration.	S. Morphiæ.	Tr. Ver. Viride.	SYMPTOMS AND RESULTS.
			Gr.	Gtts.	
10 P.M.	120	20	¼		Bowels opened by ol. ricini, 1 oz.
11 "	124	20	¼		
12 "	130	22	¼		No pain or tenderness—Not much tympanites.
Feb. 14th.					
1 A.M.	130	22	¼		Awake.
3 "	120	20	¼		Asleep.
4 "	104	20			Sleeping.
5 "	100	22			
6 "	118	24	¼		Slight tenderness—Milk still secreted.
8 "	120	24	¼		
9 "	146	24	¼		
10 "	120	24	¼		Tongue furred—Pupils contracted.
11 "	108	16			Sleeping.
12 M.	104	15			

FEB. 14th.	Pulse.	Respiration.	S. Morphiæ.	Tr. Ver. Viride.	SYMPTOMS AND RESULTS.
			Gr.	Gtts.	
1 P.M.	124	18	¼		
2 "	120	18	¼		Tenderness and tympanites not marked.
3 "	126	16	¼		
4 "	120	19	¼		
5 "	132	30	¼		S. quiniæ, 2½ grs.—Sitting up—No pain.
6.30 "	120	18	¼		
7.30 "	120	20	⅛		
8.30 "	120	16			
10 "	120	18	¼		
11 "	116	14	¼		
11.30 "	112	16	¼		
Feb. 15th.					
1.30 A.M.	120	14	¼		
2.30 "	128	14	¼		
4 "	136	22	¼		
5 "	132	20			
7 "	132	16			
9 "	138	24	¼		S. quiniæ, 2½ grs. Pain and tympanites increased—Lochia scanty.
10.30 "	126	19	¼		
12 M.	132	20	⅛		
2.30 P.M.	140		½		
4 "	140	13		10	Pupils well contracted—Narcotized.
5 "	132	16	¼	10	
6 "	132	20	¼	10	
7.30 "	120	20	¼	10	
9 "	120	14	¼	10	
10.30 "	132	24	¼	12	
11.30 "	114	19	¼	12	
12.30 "	120	18	⅛	12	
Feb. 16th.					
1.30 A.M.	108	12		12	Not much pain or tenderness.
2.30 "	108	19		12	
5 "	124	17		15	
7 "	118	20		15	S. quiniæ, 2½ grs. Pain in abdomen increased.
9.30 "	92	22			Belching—Some pain in right side of chest—Milk still secreted—Face pale, livid marks under eyes.
11 "	90	19	⅛		Hiccough and slight vomiting—Pain, on pressure, in iliac regions.
12 M.	66	18			Lochia returned—ceased during the night.
1.30 P.M.	72	21			Pulse soft and full—Tongue clean.
3 "	76	24			
4.30 "	92	21	⅛		S. quiniæ, 2½ grs. Skin hot and dry.
6 "	100	18	⅛		
7 "	100	30	¼	10	
8 "	108	25	¼	10	
9 "	116	26	¼	15	
10 "	112	36	⅛	15	
11 "	112	28	⅛	15	
12 "	120	28	½	15	

FEB. 17th.	Pulse.	Respiration.	S. Morphiæ.	Tr. Ver. Viride.	SYMPTOMS AND RESULTS.
			Gr.	Gtts.	
3 A.M.	120	30	½		S. quiniæ, 2½ grs. Tympanites increased, restless, wandering—Skin hot and dry.
4 "	108	28	¼		Pupils contracted.
5 "	100	24	¼		Still wandering—Pupils not so contracted—Turpentine stupe to abdomen.
6 "	120	36	½		Moaning—Respiration irregular; restless.
6.30 "		24			
7 "	108	28	¼		
8 "	110	20	¼		Tossing about in bed; moaning. S. quiniæ, 2½ grs.
9 "	102	24			Sleeping.
10.30 "	104	20			Sleeping more quietly; countenance anxious; lips livid.
11.30 "	112	19			½ oz. port wine every ½ hour.
12.40 "					Failing.
2 P.M.	152	21			Pupils contracted.
3 "	126	22			Lips livid—Face pinched—Pulse feeble—Sinking rapidly.
6 "	156	32	¼		
8.30 "	136	24			
10.30 "	136	30	¼		
11 "	136	24	¼		
					Died on the morning of Feb. 18.

Autopsy—30 *hours after death.*—Body well nourished, half inch of fat in the mesian line.

Abdomen.—Contained about 12 oz. of serous fluid; large patches of yellowish lymph, among the convolutions of the intestines, and especially in the iliac fossæ. Peritoneum injected, principally when not pressed by the distended intestines.

Fallopian tubes, and broad ligaments, congested and dark.

Ovaries.—Mottled pink and white.

Bladder.—Empty.

Uterus.—Enveloped in lymph, flabby; pressed out into oval form by tympanitic intestines. Six and a half inches in long diameter, four and a half wide. A small patch of lymph in the os, where posterior lip was fissured.

Kidneys.—Congested. No marks of disease.

Stomach and intestines.—Tympanitic.

Diaphragm.—Covered with a layer of lymph below.

Liver.—Pushed up by tympanitic intestines.

Lungs.—Right pleura covered with patches of lymph. Left lung adherent throughout—no disease of lung tissue.

Heart.—Normal.

Pus was found in the uterine sinuses, in the fallopian tubes, and broad ligaments. Internal surface of uterus covered with a pasty, dark, grumous material.

Puerperal fever—Recovery.—Ann Nash, native of Ireland, domestic aged 27, multipara, was delivered of a healthy child, after an easy labor, Feb. 14, at 6 A.M. At evening visit, patient had a chill, followed by pain in the back and abdomen. There was also slight tympanites. Pulse 68. Lochia had not ceased. 8 P.M.—Pulse 96, resp. 20. Had another chill; pain and tenderness in the right iliac region; pain shooting through the back. Lochia normal; tongue furred. Bowels not opened. Skin hot and pungent. 9 P.M.—Pulse 104. Skin hot; complaining of pain in lower part of bowels. 9.30 P.M.—Pulse 126, resp. 55. S. morphiæ, gr. ¼. Pain and tenderness over abdomen. Turpentine stupe.

FEB. 14th.	Pulse.	Respiration.	S. Morphiæ.	Tr. Ver. Viride.	SYMPTOMS AND RESULTS.
			Gr.	Gtts.	
10.30 P.M.	108	28			
11.15 "	120	26	½		
12.30 "	102	24			Sleeping—Belching wind.
Feb. 15th.					
1.30 A.M.	108	24	⅛		Perspiring—Decubitus dorsal—Knees drawn up.
2.30 "	124	24	¼		
5 "	120	26	¼	10	
8 "	116	22		10	S. quiniæ, 2½ grs. Tympanites increase—Tenderness very marked.
9.30 "	116	22	¼	10	Sleeping—Pupils contracted.
11 "	120	21	¼	15	
1.30 P.M.	108	23	¼	15	Bowels moved freely at 13.30—Tympanites increased.
3 "	108	16	⅛		S. quiniæ, 2½ grs. Pupils contracted—Pain and tenderness increased.
4.30 "	102	22	¼		
6 "	102	20	¼	15	Vomited a little.
7 "	100	18	⅛	10	Perspiring freely.
8.15 "	108	13		10	
9 "	120	18	⅛	15	
10 "	104	16	⅛	15	
11 "	104	16	⅛	15	
12 "	104	18	⅛	15	
Feb. 16th.					
3 A.M.	90	11		5	
4 "	90	16	⅛	5	
5 "	90	16	⅛	5	

FEB. 16th.	Pulse.	Respiration.	S. Morphiæ.	Tr. Ver. Viride.	SYMPTOMS AND RESULTS.
			Gr.	Gtts.	
6 A.M.	96	16	$\frac{1}{6}$	5	
7 "	106	25	$\frac{1}{6}$	5	No pain—Sitting up—Tympanitic still.
8 "	102	16	$\frac{1}{6}$	5	
9 "	96	18	$\frac{1}{6}$	5	
10.30 "	102	16	$\frac{1}{6}$	5	
11.30 "	102	16	$\frac{1}{6}$		
12.30 P.M.	94	20	$\frac{1}{6}$		Slight tenderness in hypogastric and right iliac region—Tympanites less—Lochia still.
3 "	102	12		5	S. quiniæ, $2\frac{1}{2}$ grs.
5 "	108	24	$\frac{1}{6}$	5	
6 "	84	13			Feels much better—Transferred to Ward 8. Convalesced slowly. March 12th.—Up and doing well.

Puerperal convulsions—Recovery.—Mary Conners, native of Ireland, domestic, aged 24, married, primipara. Admitted to the hospital Feb. 1st, 1858. Patient is a large, stout, and plethoric woman. No history of previous disease could be obtained. During pregnancy she was troubled with vomiting and headache. On the night of February 14th, she came into the lying-in-ward in labor. Her pains were strong; at 12 P.M., she fancied men were standing about her. At 4 A.M., Feb. 15th, pains still strong; complained that she could not see. At 5 A.M., had her first convulsion; at 6, another, not very violent. Vaginal examination; os dilating; head presenting. Presentation L.O.A. Had no convulsion until 8; again a little before 9. Seen by Dr. Elliot 9 A.M., Feb. 14th, was bled ℥viij. from the arm; pulse fell to 80; somnolent; urine drawn with catheter, highly albuminous; os uteri dilatable; head advancing at $9\frac{1}{2}$; fœtal heart beating in the left iliac region.

9.30. Chloroform, spasm presented; uterine pains continuing; convulsions 15 minutes after operation of bleeding was concluded; chloroform administered at 9.53; pulse 80; pupils very much contracted.

Delivered at 10.15. Child feeble; woman at the time unconscious.

10.30. A convulsion, lasting a few seconds; pulse 94.

Ordered by Dr. Elliot, visiting physician, 12 grs. hydrarg. sub. mur., mixed with butter, and four hours after ℥j. ol. ricini. C.C. No. iv. over each kidney. Convulsions to be anticipated if possible by chloroform. At ten minutes of 11, grinding teeth,

and growing restless. Chloroform administered; again at 11; at 11.10, quiet; gave 12 grs. of calomel; conscious.

At 12.45 was suddenly convulsed; convulsion lasted but a few seconds. After convulsion passed off, was not as quiet as before, and in fifteen minutes growing more restless, administered chloroform; continued chloroform at intervals until after she was cupped at 1; C.C., No. iv., to each kidney.

1.10 P.M. Chloroform again, for beginning convulsions; quiet after it until 1.30, when becoming restless, chloroform was again given, until she became quiet.

At ten minutes of 2, becoming restless, grinding her teeth, rolling her head from side to side on the pillow, gave chloroform, and in a few minutes she again became quiet.

2.15. Awoke, said she felt cold, and was immediately convulsed; convulsion lasted about sixty seconds.

2.50. Slight spasmodic movements, chloroform again till quiet; pupils dilated during spasm; contracted subsequently.

3.10. Restless, chloroform till quiet.

3.45. Quiet.

3.53. After some restlessness, awoke, and had immediately another convulsion, which lasted for about twenty seconds; chloroform was administered, and at 3.55, is under its influence; strong stertorous breathing; pulse 96, rather soft.

4.10. Another slight convulsion; 4.15, apparently about to have another; chloroform till quiet; 4.20, chloroform again.

4.27. Noticing some twitching of the eyelids, immediately gave chloroform, but before she could be brought under its influence sufficiently, the spasm came on; pupils dilated. P. 116, gave chloroform after it.

4.40. Another convulsion, lasted but a few seconds, chloroform freely.

4.50. Pupils contracted; quiet under chloroform.

5.20. A very slight convulsion came on, no premonitory symptoms; pulse 96; pupils contracted after spasm; chloroform given; three more restless attacks controlled by chloroform, before 6.30; at 6, ℥j. ol. ricini was given.

6.50. Growing restless, chloroform again administered; spasm came on, lasting about sixty seconds.

7 P.M. Another convulsion, lasted forty seconds; pulse after it 110.

7.20. A violent convulsion, lasting about ninety seconds; pulse after it 160; soon after another, not as violent; pulse irregular, and intermittent after it; respiration 26; chloroform again given; two restless periods controlled at 8 P.M.

9 P.M. Restless, tossing from side to side; no convulsion; gave an injection of ol. ricini ℥ij., and 2 qts. warm water.

Visited by Drs. Elliot and Taylor; decided not to bleed; pulse contra-indicating; advised C.C. to back of neck, and chloroform continued.

9.30 P.M. Bowels moved freely after injection; C.C., No. iv., to back of neck; pulse 126, feeble; respiration 24; chloroform; quiet until 11.15, awoke, and had a violent convulsion, lasting a minute and a half; pulse after it 165.

11.30. Restless; chloroform again; bowels moved again.

Feb. 16th.—2.30 A.M., Has had no convulsion since 11.15, chloroform continued; pulse 100, feeble.

7.05. Restless; chloroform till quiet.

7.20. Restless; soon became quiet, sleeping; continued to sleep until 9.45, when awoke became restless; chloroform again.

10.30. Pulse 108; still quiet; at 11 restless; gave chloroform.

12 M. Awoke conscious for first time since first convulsion; put under chloroform again; urine drawn; not so highly albuminous; bowels again opened.

12.30. Asked for drink, went to sleep again; pulse 92, not so feeble; respiration 21.

3.40. Pulse 120, resp. 20, face flushed; some tenderness of abdomen.

4.30. Pulse 120, resp. 18, asleep; has taken some nourishment; complains of headache.

7 P.M. Restless; complaining that her sides feel sore; is conscious, answers questions readily; has no headache; beef tea.

8, P.M. Pulse 120, feeble; asleep.

Feb. 17th.—2.30 A.M. Pulse 108; awake.

3.30. Passed urine in large quantity; sleeps nearly all the time.

10.30. Awake; sensible; headache; lochia profuse; feels tired.

3, P.M. Pulse 108; skin natural; sleeps.

Feb. 18th.—9 A.M. Pulse 100; sensible; complains that her head feels heavy; wants to eat.

Feb. 19th.—Urine drawn and tested; albumen much diminished in quantity; Feels well; no pain; pulse feeble, not frequent.

Feb. 15th.—Urine highly albuminous; becoming almost solid by heat and nitric acid; under microscope no abnormal appearance; urates abundant.

Feb. 16th.—Urine not so highly albuminous; epithelial cells of kidney looked unhealthy; no nuclei seen; appeared slightly fatty.

Feb. 17th.—Still less albumen; pus cells, from lochial discharge.

Feb. 26th.—Very little albumen; abundance of urates.

March 2d.—But a slight trace of albumen; under microscope abundance of pus cells; no epithelial cells found.

(Presence of albumen from pus of lochial discharge?)

ART. VI.—*Report of One Hundred and Forty-two Cases of Fracture treated in Bellevue Hospital, New York.* By J. J. CAMPBELL, M.D., late House-Surgeon to Bellevue Hospital.

(Continued from page 406, Vol. 4, 3d Series.)

Patella—Number of Cases, 3.

Case 1.—J. G., aged 35, good constitution, was admitted for transverse fracture of the patella, caused, June 20th, by the kick of a horse. The separation of the upper from the lower fragment was fully an inch. Considerable inflammation of the knee-joint followed—but soon yielded to treatment. The limb was placed on an inclined plane flexing the thigh on the pelvis. The upper fragment was drawn down, and retained by a loop of adhesive plaster and bandages. When the limb was taken down, August 31st, good firm bony union was found. A small bony ridge remained to show the point of fracture.

Case 2.—E. M. C., aged 30, good constitution, was admitted with transverse fracture through the middle of the patella, caused, July 2d, by falling and striking violently on her knee while it was flexed. The fragments were separated more than an inch. Considerable inflammation of the joint followed, but soon subsided under treatment. The limb was placed on an inclined plane, etc., as in case one, but the fragments could not be closely approximated. The dressings were dispensed with Sept. 12th, and ligamentous union found. The ligament was nearly a half inch long.

Case 3.—P. M. G., aged 32, delicate constitution, was admitted for transverse re-fracture of the patella, caused, Jan. 19th, by falling and bending his knee violently and suddenly. The first fracture happened fourteen weeks before, and was caused by falling on his knee while it was flexed. He recovered from this fracture with ligamentous union in twelve weeks. In two weeks after this, he fell as above stated, and ruptured the newly formed ligament. He was treated like the two preceding cases for ten weeks, and recovered with a ligamentous connection a half inch long. While he remained in the hospital after his recovery, he could walk well enough on the level, but when he attempted to go up stairs, this limb had to follow the other, as he was unable to bend this knee.

Remarks.—Two of the cases were males, and one was a female. In the three cases, the fracture was on the left side. Two were the result of direct violence, and one of muscular action. In all the cases the fracture was transverse, and through the middle of the bone. They

were all treated on the single inclined plane, keeping the limb flexed on the pelvis, to retain the triceps extensor cruris muscle of the thigh. The average duration of treatment was a little over sixty-nine days, although union had occurred much sooner than this. The average period at which they were permitted to move about was seventy-eight days. In one of the cases, there was good bony union, and in two the union was by a ligament half an inch long. The knee was a little stiff in all the cases, while they were in the hospital.

Tibia—Number of Cases, 6.

Case 1.—B. D., aged 60, pretty good constitution, was admitted for oblique fracture of the tibia, an inch and a half above the internal malleolus, caused, April 26th, by catching her foot in the carpet and twisting on it. Was treated in the starch apparatus until June 5th, when firm bony union without any deformity was found.

Case 2.—T. M. G., aged 28, good constitution, was admitted with compound comminuted fracture of the tibia in its middle, caused, Sept. 9th, by the kick of a horse. Was treated in a fracture box until union occurred. Was discharged soon afterwards (Nov. 19th), with firm union.

Case 3.—M. C., aged 32, good constitution, was admitted for fracture of the tibia, at the junction of the middle with the lower third, caused, Sept. 20th, by a kick. The limb was dressed with the starch apparatus two weeks after the accident. He was discharged well, Nov. 7th.

Case 4.—L. L., aged 39, good constitution, was admitted for transverse fracture of the tibia, three and a half inches above the internal malleolus, caused, Sept. 29th, by falling from a ladder, and striking on his tibia. The limb was placed on a double inclined plane. When discharged, Nov. 1st, there was good union and no deformity.

Case 5.—S. G. C., aged 45, robust constitution, was admitted for fracture of the internal malleolus, caused, Sept. 24th, by falling six feet, and twisting his foot under him. A wedge-shaped pad, extending from the knee to the external malleolus, with its base downwards, and a splint over it, extending below the foot, was secured to the outer aspect of the leg. The foot was kept firmly bound to the lower end of this splint. He was discharged well, without any deformity, and good use of the limb, Dec. 10th.

Case 6.—E. R., aged 39, good constitution, was admitted for oblique fracture in the lower third of the tibia, caused, Nov. 1st, by a blow with a bar of iron. Was treated on the double inclined plane until union occurred.

Remarks.—Out of the six cases, five were males and one was a female. The violence was direct in four instances, and indirect in two. in one case the fracture was in the middle third, in one at the junction of the middle with the lower third, and in four it was in the lower third. Three were oblique, one transverse, and one compound and comminuted. Two were treated with a starch bandage, two on a double Inclined plane, one in a fracture box, and one with Dupuytren's splint. The average duration of treatment was a little over forty-three days.

The longest sixty-one, and the shortest thirty days. Firm union occurred in all the cases. There was no deformity in three at least of the cases. The use of the limb was good in nearly all of the cases.

Fibula—Number of Cases, 7.

Case 1.—J. R., aged 22, good constitution, was admitted for oblique fracture of the fibula, an inch and a half above the malleolus, caused, May 24th, by slipping and twisting her foot under her. The starch bandage was applied on the fourth day, and when removed, June 26th, there was good union and no deformity.

Case 2.—P. D., aged 20, good constitution, was admitted for transverse fracture in the lower third of the fibula, caused, Nov. 3d, by jumping from a height, and twisting his foot under him. Was treated in a fracture box until union occurred.

Case 3.—H. G., aged 70, good constitution, was admitted with a fracture of the fibula in its lower third; caused by a fall, Dec. 6th. A splint and wedge-shaped pad was placed on the inner side of the leg, and the foot bound to it, until union occurred, Dec. 30th. No deformity resulted.

Case 4.—N. U., aged 20, was admitted for fracture of fibula in its lower third, caused by a fall down stairs, Dec. 1st. A simple bandage, with rest in bed, was the only treatment. When discharged, Jan. 27th, the union was perfect without any deformity.

Case 5.—W. D., aged 45, good constitution, was admitted for fracture in the lower third of the fibula, complicated with rupture of the internal lateral ligament and luxation of the foot outwards, caused, Dec. 13th, by a fall. The foot was reduced, and the leg confined on a double inclined plane. When discharged, Jan. 22d, the union was good, and the use of the foot excellent.

Case 6.—S. S., aged 25, good constitution, was admitted for fracture through the external malleolus, caused, Jan. 13th, by a fall. The treatment was the same as in Case 3. Good union resulted in a month. She complained of some pain and stiffness in the joint for some some time after she commenced to walk about.

Case 7.—J. D., æt. 34, good constutition, was admitted for transverse fracture of the fibula, an inch and a half above the malleolus, caused, Feb. 9th, by a blow on the part. The leg was left in a fracture box for three weeks, and was afterwards confined to a splint as in Case 3. The union was completed in about ten days more. When discharged, March 28th, the union was firm, and the use of the foot good. Like the previous case, he complained of some pain when walking about.

Remarks.—Four out of six of the cases were males and two were females. Six were the result of indirect violence, and one of direct. They were all situated in the lower third; one was through the malleolus, and two an inch and a half above it. In five cases, in which the direction of the break was noted, three were oblique and two transverse. The starch bandage, the fracture box, double inclined plane, and Dupuytren's splint were the means employed in the treatment. The

average duration of treatment was a little over thirty-one days in six of the cases. The union was good; no deformity resulted; and the use of the foot, etc., with but few exceptions, was excellent.

Tibia and Fibula—Number of Cases, 15.

Case 1.—P. K., aged 30; good constitution; was admitted for compound fracture of the tibia, just above its lower third, and simple fracture of the fibula at the same joint, caused, March 2d, by a bank of earth falling upon his leg. The leg was placed in a fracture box for seven days, and evaporating lotions, etc., applied. March 9th, two splints, one on the outer and the other on the inner side of the leg, were applied, so as to keep the fractured surfaces in exact coaptation. It was soon found that abscesses were forming and burrowing in various directions. These were laid open, and the limb went on doing well. By April 13th, the openings in the soft parts were filled with granulations. By April 27th, the bones were so firmly united that the limb could be lifted from the bed by taking hold of the toes.

Case 2.—J. M. G., aged 67; good constitution; was admitted with fracture of the tibia and fibula, in their upper third, caused, March 24th, by a fall. The leg was placed in a fracture box until April 1st, and then on a double inclined plane until May 6th, when union was formed, but very weak. A starch apparatus was then applied, and the patient allowed to leave his bed. He took his discharge May 15th. The result is not known.

Case 3.—T. A., aged 51; good constitution; was admitted for oblique fracture of the tibia and fibula, at the juncture of the lower with the middle third, caused, April 14th, by a fall. His leg was kept in a fracture box for thirty-six days, and then on a double inclined plane until June first, as the union was weak. A starch apparatus was then applied; and when he was discharged, July 1st, the union was firm.

Case 4.—M. F., aged 59; good constitution; was admitted for oblique fracture of the tibia, in the upper part of the lower third, and of the fibula, in the middle, caused, April 28th, by a blow on the leg that knocked him down. The leg was placed in a fracture box for a few days, and then on a double inclined plane, as deformity was threatening. In a few days more it was dressed with a starch bandage, as the deformity increased while on the double inclined plane. When discharged, June 13th, the union was firm; no deformity remained, and the use of the leg was excellent.

Case 5.—J. W., aged 25; good constitution; was admitted for compound oblique fracture of the tibia, just above the middle third, and of the fibula at a joint a little higher, caused, May 17th, by falling twenty-seven feet, and alighting on his feet. The lower portion of the tibia was pushed up among the muscles, behind the upper part of the bone. On the following day the lower part of the upper fragment was sawn off, and the parts placed in position in a fracture box. May 22d, the leg was put on a double inclined plane. May 26th, abscesses that were found burrowing among the muscles in various directions, were opened. The soft parts over the bone began to slough, accom-

panied by typhoid symptoms. Extra diet, brandy, tonics, and opium were given freely. The sloughing soon ceased, and he began to get better. Typhoid symptoms began again, and he commenced running down until July 12th, when he died.

On post-mortem examination, not the slightest trace of an attempt at union could be discovered. Extensive sinuses were found in all parts of the limb. The bone was increased in many places. The inter-articular cartilages were destroyed.

Case 6.—J. D., aged 30; good constitution; was admitted for compound fracture of the tibia, and simple fracture of the fibula, in their lower third, caused May 10th, by being struck on the part by a piece of rock from a blast. The leg was placed in a fracture box for fourteen days, and then on a double inclined plane for sixteen days more. From this time until June 17th a side splint, etc., was applied. Firm union had taken place in the meantime.

Case 7.—S. S., aged 20; constitution tainted with syphilis; was admitted for oblique fracture of the tibia and fibula, in their middle third, caused, May 15th, by falling from a swing. Her leg was treated in the fracture box and the double inclined plane; but no attempt at union was made until she was put upon an antisyphilitic course of treatment. When she was discharged, in August, there was firm union, and but very little deformity.

Case 8.—O. C., aged 50; good constitution; was admitted with simple oblique fracture of the tibia and fibula, in their lower third, caused, May 20th, by slipping and striking his shin on the edge of a curbstone. The leg was placed on a double inclined plane until June 11th, when a side splint was applied. The union was good and firm June 26th.

Case 9.—C. A., aged 35; good constitution; intemperate; was admitted for simple fracture of the tibia, and comminuted fracture of the fibula, caused, June 17th, by falling three stories, and striking on his leg. The leg was kept in a fracture box for the first six days, and then on a double inclined plane until good union had taken place. Sept. 1st, he limped some while walking.

Case 10.—J. R., aged 32; delicate constitution; was admitted for refracture of the tibia and fibula, at the junction of the upper and middle thirds, caused, August 29th, by being kicked on the part and knocked down. This was the third time that these bones were broken, or the second time they were refractured, within nine months. Union occurred, and he was able to walk about in eleven weeks after the first fracture. A great deal of difficulty remained, as the fracture had been very oblique, and the lower fragment rode upwards. Two weeks after his recovery, he fell down on the sidewalk and refractured both bones. He recovered in twelve weeks so as to be able to get about again. The deformity still continued. Six weeks subsequent to his recovery, or August 29th, he again suffered a refracture, and came into the hospital for treatment. There was nearly a half an inch of shortening, caused by overriding of the lower portion of the tibia. The upper end of this portion of the bone was on a plane more than an inch higher than the

upper fragment, and hence a large depression existed above it. A piece of adhesive plaster was attached to each side of the leg below the point of fracture, and formed a loop beneath the foot. The limb was then carefully bandaged and placed on a splint made with a wheel in the foot-piece, over which a cord played, attached at one end to the loop of plaster under the foot, and at the other to a weight. Good extension was kept up on the leg by means of this weight, and the amount of deformity was very much lessened. Compression was made over the prominence by means of a strip of adhesive plaster passed around the leg and splint. The extension was let up Sept. 28th, and the leg examined, when very good union was found, with but little deformity. A starch bandage was then applied as a means of safety against any chance of refracture. When discharged soon afterwards, he had good use of his legs and feet.

Case 11.—P. D., aged 38 ; delicate constitution ; was admitted for oblique fracture of the tibia in its middle, and of the fibula a little higher, caused, Sept. 28th, by the falling of a bank of earth on his leg. The leg was placed in a fracture box for the first week, and then on a double inclined plane until Dec. 1st, when good union had occurred. Two weeks after his admission, the fracture of the tibia was made compound by forcing the broken end of the lower fragment through the soft parts above it while he was in an epileptic convulsion.

Case 12.—J. J., aged 33, good constitution, was admitted for transverse fracture of the tibia, and oblique fracture of the fibula joint, above the malleoli, caused Dec. 12th, by falling with his leg bent under him. The limb was placed in a fracture box. When discharged, June 8th, the union was good, and no deformity remained.

Case 13.—J. D., aged 40, good constitution, was admitted for a fracture of both bones, just as in the preceding case, caused Dec. 7th, by a fall, and twisting his leg between a curbstone and a wagon. The leg was placed in a fracture box, but union was slow. He sustained a fracture of both bones at this point a year ago and recovered with deformity. When discharged, Feb. 25th, the union was good, but a good deal of deformity remained, and he could not walk without crutches.

Case 14.—W. O. B., aged 20, delicate constitution, was admitted with oblique fracture of the tibia and fibula in the upper third, caused Jan. 22d, by falling three stories and striking on her leg. This case presented the same tendency to deformity that Case 10 did, and was treated on the same splint. She was suffering at the time from profuse leucorrhœa. At the end of seven weeks, the limb was examined, but no union was found. She was then put upon wine in addition to her tonic treatment. At the end of three weeks more, pretty firm union, with but little deformity resulted.

Case 15.—J. B , aged 51, good constitution, was admitted for fracture of the tibia and fibula just above the malleoli, caused Feb. 4th, by slipping, and forcibly turning his foot outwards. The leg was kept in a fracture box for seven days, until all the inflammation had subsided, when it was put on a double inclined plane for fifteen days more, and then in a starch apparatus until good union had taken place.

Remarks.—Of these fifteen cases thirteen were males and two were females. Eight of them were caused by direct violence to the tibia at least, and all the rest, no doubt, by indirect. In two of the cases, the fracture was in the upper third, four in the middle third, one at the junction of the middle with the lower third, five in the lower third, three of which were immediately above the middle, and in one the fibula was broken in its middle, and the tibia in its lower third. Both bones together were fractured in eight instances. The fibula was broken transversely in one, and comminuted in the other. The fracture in the tibia was compound in three cases. In two cases, the fracture box alone was employed, and in ten of the remaining cases it was used for about a week in each case. The double inclined plane was employed in ten cases for a time; the extension splint that I got up, in two cases. The starch bandage was made use of part of the time in three cases. The average duration of treatment was fifty-two days. The shortest time twenty-five days, and the longest seventy-seven. The average period after the fracture until good union occurred, in ten cases, was a little over fifty-three days. The shortest time, twenty-seven, and the longest seventy-seven days. There was no deformity in two cases, very little in five, and a good deal in one. The use of the limb was pretty good in five, and imperfect in two.

General Remarks.—One case occurred during delivery, one on the sixteenth day after birth, four during the first period of ten years, nine during the second, thirty-three during the third, twenty-nine during the fourth, twenty-three during the fifth, eighteen during the sixth, eight during the seventh, and one at the seventy-fourth year.

Of one hundred and thirty-eight cases in which the sex was mentioned, one hundred and one were males and thirty-seven were females.

Of sixty-cases in which the side was mentioned, thirty-five occurred on the left, and thirty-one on the right. Fifty-seven cases were oblique in their direction, thirty-four transverse, five comminuted, five comminuted and compound, and seven compound.

Seventy-eight were the result of direct violence, and fifty-seven of indirect, including three cases caused by muscular action.

During	March	eleven	occurred,	Spring, thirty-two
"	April	thirteen	"	
"	May	eight	"	
"	June	six	"	Summer, twenty-five
"	July	six	"	
"	August	thirteen	"	
"	September	thirteen	"	Autumn, forty-three
"	October	twelve	"	
"	November	eighteen	"	
"	December	seventeen	"	Winter, forty-two
"	January	twelve	"	
"	February	thirteen	"	

ART. VII.—*Case of Poisoning by Arsenic from working in Scheele's Green. Coroner's Inquest and Verdicts.* By STEPHEN GRISWOLD, M.D., New York.

JAMES FITZGERALD, aged 12 years, 10 months, residing at No. 280 West Sixteenth street; a stout lad of good constitution, engaged at work in an establishment for the manufacture of paper-hangings; first complained of headache at 11 A.M., Tuesday the 23d of March, and died on Thursday the 25th, at 8 A.M.—forty five hours.

On the morning of his attack, he commenced working at about nine o'clock, in connection with two other lads, Thomas and William Trumbull, at "grounding" green paper, the color, as used, being composed of arsenite of copper, brought into a semi-fluid condition with water, or other liquid, and glue.

The process of grounding consists in spreading the color upon paper (covering the whole surface), and is performed upon a machine with a horizontal surface, over which the paper passes, the color being supplied from a box attached to the machine, and is spread on by rapidly revolving brushes. The paper thus grounded passes on, and is taken up and suspended for drying upon a "hanging" machine, by a boy introducing a stick at every eight yards. Thus suspended, it moves gradually on over steam pipes to a distance of about a hundred feet, in from twenty to thirty minutes, when it is dried and is reeled off by another boy. The especial business of the deceased on the day he took sick, was to stir up the color contained in a barrel, and supply it with a bucket and dipper to the box connected with the spreading machine. William Trumbull put in the sticks for suspending the paper, and Thomas reeled it off at the other end of the room. There were several others engaged in the same room upon similar machines, but using different colors.

With this premise, I proceed with the testimony, as adduced before Coroner Hills, and also with an account of the inquest.

March 25th, 1858.—Margaret Fitzgerald, being sworn, says: "I am mother of deceased. Day before yesterday, my James went to work as well as usual. About 12 o'clock he came home to dinner, and then complained of pain in the head. He gradually got worse. About six o'clock he became senseless, seeming to be in a deep sleep. The place where he worked was a paper-hanging manufactory. The doctor said he supposed it was from the effects of the green paint, used in the manufacturing of the paper, that was the cause of the death. He had been working there about eighteen months. He was always in good health until the time he was taken on Tuesday, excepting about Thanksgiving, when he had an attack of the small-pox."

March 26th, 1858.—E—— D—— (the foreman of the room), being sworn, says: "I was working in the same room with the deceased on the morning he took sick. I was exposed to all the fumes and vapors that arise from any of the paints and colors that were used at that time, as much as deceased. I was not made sick in the least from them, nor have I ever been affected *badly* from being exposed to them.

I have heard deceased cough very much for the last two weeks. At times he could scarcely speak, being choked, having so short breath." This affidavit was signed with his mark.

R. W., being sworn, says: "I am foreman at the establishment at . . . Knew deceased. His business was to supply colors to the paper boxes connected with the grounding machines. On the morning in which he took sick he was engaged in supplying the green color. He worked about two hours after this color was brought into the room, supplying colors to four machines, only one of them green. . . . There were eight or nine persons engaged at the same time in the room with him. All in the room were exposed to any smell or fumes that might arise from the colors as much as deceased was. *None of them were taken sick on that day or subsequently*, although we used the green color throughout the day till eight o'clock. Green paint, similar to that, has always been in use since I have been in the manufacture of paper-hangings, which is thirty years. I never saw any bad effects from its use, except occasionally an eruption of the skin. I never heard of a death following its use. The kind of business at which he was engaged does not expose the worker to any injurious effects that the paint may have, so much as those that mix it, or roll the paper after it is finished. I have frequently mixed the color, handling it freely, and exposing myself to it much more than deceased was, and have never had any injurious effects arise therefrom."

J. McM. . . . "I am a workman at the above-mentioned factory. I have been engaged in the business over four years. My occupation exposes me to any fumes that could arise from the coloring matter in question much more than the deceased was exposed. I have never been made sick from such exposure, and have never suffered any in connection therewith, *except when the color has remained on the skin, in which case sores have been produced.*"

Wooster Beach, M.D., residing at 92 West Twenty-sixth street, being sworn, says: "I made a post-mortem examination on the body now lying dead at No. 280 West Sixteenth street, March 26th [it was the 25th], about 3 o'clock P.M. The external appearance of the body indicated nothing unnatural. On opening into the thorax, the upper surface of the lungs appeared natural and healthy. On raising the left lung, the pleural cavity was found to contain about a quart of [colorless] liquor. The posterior surface of that lung was completely covered with soft false membrane, as was also the pleural surface of the diaphragm and the anterior surface of the posterior wall of the thorax. The posterior and inferior portion of the lung was intensely congested. The right lung was congested at its inferior portion. The other organs were healthy. From the appearance of the body and the history of the case, I am of opinion that death was caused by acute pleuritis."

Stephen Griswold, M.D., residing at No. 581 Hudson street, being sworn, says: "I first saw James Fitzgerald at No. 280 West Sixteenth street, on Tuesday the 23d inst., at about half-past eight P.M. I found him in bed, upon his back, in a partially comatose condition, writhing and twisting himself from side to side, but so prostrated in

strength as to be unable to rise or sit up. His countenance presented a peculiarly pale, greyish appearance. His skin was cool, but his lips were cold and livid. His eyes were dim and glassy. He was constantly moaning—(a feeble moan.) When aroused, and asked a question, he seemed to but partially understand, and though he appeared to try to make some answer to questions, his answers were wholly unintelligible. After much effort, a hasty view of his tongue was obtained, which was clean, moist, and pale. His breathing was imperfect and irregular, being short and quick, and more slow and gasping, by turns. His pulse was very feeble and irregular; for a second or two, it would be a succession of minute thrills, so small as to be scarcely perceived, and so rapid as not to be enumerated; and then would follow two or three more perfect pulsations."

The following graphic narrative was received from his mother, whose language is now used, thus slightly varying the phraseology of this part of the statement as contained in the evidence upon the inquest. It simply renders the description more minute. She said: "My James left home this morning in good health and unusual spirits. At a little past twelve o'clock he returned with his cravat tied around his head. The dinner was ready, and he sat down to the table, but did not eat. I poured him out a bowl of coffee, which he took, and, resting his elbows on the table, drank it all off, and then rested his head upon his hands. I asked him why he did not eat, to which he replied, 'Don't you see, I am eating.' This was the first he had spoken. I then asked him what was the matter, and why he had his head tied up? To which he answered, 'The smell of the green paint made me sick.' He then got upon the bed and fell into a kind of doze. I got three cents' worth of senna and salts and made a tea of half of it, of which I gave him about a quarter of a tumblerful, when he was seized with vomiting. He vomited about a quart of greenish, bilious-looking fluid. I tried twice more to give him the senna and salts, but he vomited it up immediately; so I laid him down, and he again became stupid. At about five o'clock I again got him upon the side of the bed—having to hold him up—with his feet in warm water, when he was again taken with vomiting without having drank anything; and, finally, he fell back like a log of wood. I then went again to the apothecary, and he gave me some pills; but when I returned, at about six o'clock, I could not open his mouth with a spoon. The last he spoke (that day) was when I soaked his feet, when he said, 'Mother, the green paint has killed me.' At first he complained all of the pain in his head; but afterwards he complained some of pain under his arms."

To return to the testimony: "I also learned from his brother, that he first complained of pain in his head at about 11 A.M., and that at 9 A.M. he commenced working with the green paint, some of which I saw upon his nails.

"From 11 to 12 A.M. I was again with deceased. He continued in the same condition as at my previous visit, with the exception of a trifle more heat of skin, and the pulse the least degree more steady. Dr. Denison visited the patient with me.

"Wednesday, the 24th, 9 A.M.—Learned that from 2 till 4 A.M. he had been more quiet, having apparently slept; after which he had aroused with more consciousness. Found him less stupid, and able to answer questions by (a feeble) 'yes' and 'no.' He manifested pain, especially upon making pressure upon the lower portion of the sternum; and answered, 'No' when asked if his head ached. He had passed his urine, and purged, two or three times during the morning. His breathing was more regular, and about 40 to 50 inspirations to the minute. The pulse more steady, but still very feeble and variable, being about 120 to 130 to the minute.

"1½ P.M.—The patient again comatose and unable to speak, but was constantly moaning. His respiration had increased to 50 and upwards; the pulse to 130 and upwards, and was very irregular. Since morning, the abdomen had become distended and tympanitic. 4½ to 5½ P.M. Similar condition, but failing. Had had more purging, of which I found about two quarts of thin yellow feces by him, which had recently passed. Dr. Buck in consultation. 9 to 10 P.M. Failing; no more purging.

He had no cough from the beginning to the end of his illness.

"I am of opinion that the cause of death was from inhaling some acrid poison, which induced inflammation of the lungs, and prostrated the vital powers.

"Have visited the room where deceased worked. There was but little ventilation, and no draught. The heat and odor in the room was very oppressive, the temperature being probably upwards of 100 degrees."

The following testimony, by the same, was also subsequently taken, viz.: "That at my 4½ P.M. visit, on Thursday, there was shadowed forth in the skin a cloudy purpuric condition, which had been faintly perceptible during the afternoon, and was especially marked upon the anterior surfaces of the thighs; and that on Thursday morning, about two hours after death, it presented the same appearance, as it did also in the afternoon, when the post-mortem examination was made by Dr. Beach, when I called his attention to it. . . . That when that examination was held (seven to eight hours after death) the body was not yet cold. The stomach and intestines were inflated with gas, and apparently contained nothing else. The inside of the stomach was not examined, excepting a small surface turned out through a small opening in the anterior wall, which was of a pale color. The peritoneal surface of the abdominal viscera presented an unusually pearly appearance, with the exception of some small intestine lying posteriorly on the left side, which was streaked, of a pinkish color, and another portion, three to four inches long, lying near this, of a darker hue, and which was discovered by simply turning over the bowels, the examination not being very thorough. Neither kidneys nor bladder were examined."

The foregoing testimony, with the exception of that portion designated, having been taken in a very quiet manner by Dr. Beach, Coroner Hills arrived, administered the oaths to the witnesses that what they

had subscribed to was correct, and empannelled a jury, consisting of the foreman of the block-cutting department in the paper-hanging manufactory, a police officer, and four other citizens, to whom he then hastily read the testimony, when objections were made to the proceedings by some of the jurors, on the ground that they had not seen the witnesses sworn, or heard them give their evidence, with an opportunity of questioning them. But these objections were overruled, and the case proceeded with.

Mr. C., the proprietor of the manufactory, made some statements, a portion of which were taken as testimony as follows: . . . "I have been engaged in this business twenty years. I have worked this particular color at which deceased worked on the day he took sick. I was in the same room (on the day in question), about three-fourths of an hour, watching the working of the color mostly. In my experience, I have never known any of the workmen affected *seriously* by it. In the *preparation* of the color—arsenite of copper—persons are sometimes by it. This is not done in our establishment, as we buy it ready for use. *No other persons who were at work in the room were affected at all*, nor have I ever known any *seriously* affected thereby. Men have worked this color, using their hands and arms in mixing it; one man mixing some tons without any injury, some two or three days at a time."

The room was now closed and the coroner left alone with the jury. After nearly an hour spent in argument and persuasion, four of the jurors were yet unable to believe with the coroner that the boy had come to his death by simple "pleurisy, and congestion of the lungs." *They* wanted to know what had *caused* the pleurisy and congestion, and therefore desired a chemical analysis, which, however, the coroner told them he would not have done. But they would not agree, so further proceeding in the case was adjourned till Sunday the 28th of March.

As it was apparent that an effort was being made to obtain a verdict that the deceased had come to his death from other cause than that of poisoning, and (I will quote the testimony)—"fearing the coroner would neglect a chemical analysis in the case, and wishing to have positive proof as to the poisoning, believing that it involved the peculiar question of the introduction of arsenic into the system by inhalation—on the morning following the death of the deceased, at the advice of Dr. Buck, after procuring the consent of the family of the deceased, in the presence of his uncle, I reopened the chest and took from the cavity of the left side thereof, a bottle of bloody serum," (a portion of the lung having been cut away at the post-mortem examination, blood had extravasated). "In another bottle was placed a portion of congested right lung, in another a portion of the heart, and small portions of intercostal muscle, and in another a small piece of muscle from the thigh. Portions of other organs would have also been taken but" (*fortunately*) "the uncle objected, and therefore were not." . . . . . "I also obtained from the manufactory a small bottle of coloring matter pointed out to me as an article similar to that in use by the deceased on the day he took sick. These materials, on the following morning, I

delivered to Prof. St. John, at the College of Physicians and Surgeons for examination."

Sunday, March 28th, the inquest was proceeded with. Upon inquiry, information was obtained, that two lads, Thomas and William Turnbull, who had been at work upon the same color with deceased (and the only ones) had been affected thereby, and that they could not be persuaded to come forward to testify; which being stated to the coroner, he sent for, and produced them. He then also, sent for Dr. Buck.

A witness from the establishment was examined, but his testimony contains so many discrepancies as to render it wholly valueless for this publication. It is therefore passed by.

March 28th, 1858, Thomas Turnbull being sworn, says: "I worked in the same room with deceased. Last Tuesday he took sick in the forenoon, saying that he had a headache. I did not hear him complain of anything else than the headache. He complained of the headache at about eleven o'clock. We commenced working on the green color at about nine o'clock. Deceased put in the colors for four machines, only one of them green. My business was to reel off the paper at the other end of the room from the deceased. My nose was made sore so as to bleed. It bled in the shop on Wednesday; it also bled out of the shop—it bled at home on the next morning, and at night. I also spit blood; I coughed it up—it was phlegm, streaked with blood. I was not affected in any other way. Have worked in this establishment over three years. My work is reeling the paper after it is dried. I have worked at reeling over a year; before this I worked at different things. I worked at the same work that deceased worked at, but in connection with the printing-machine, which is in another room. I have worked at this green color four or five times in all since I have been there. I have reeled the green two or three times before this time. The only time I have been affected by my work was last Tuesday. Myself and brother and deceased and Mr. Devine were the only ones who worked at this color. Mr. Devine was foreman of the room. My brother was also affected; I do not know of any others being affected."

Question (by coroner). "Are you sure it was the green color that made your nose bleed?" *Answer.* "I think it was.

"The room is heated by steam pipes; the pipes are so hot I cannot bear my hand upon them. The paper in drying hangs quite close to the pipes—it touches in some places. Deceased had some cough—some time, four or five months. Sometimes he was very much choked. He coughed the same, in or out of the shop."

With reference to this cough, the mother has since stated that soon after getting out from the small-pox, he came home one night with a cold and cough, and that she soaked his feet and gave him some ipecac., and after that she heard no more of the cough. This is confirmed by several members of the family, and others who were in the habit of seeing him daily.

Gurdon Buck, M.D., residing No. 121 East Tenth street, being

sworn, says: "I was requested on Wednesday afternoon, to visit a patient in Sixteenth street, with Dr. Griswold. I arrived there at about 5 P.M. I understood, by inquiry, that on the day previous, the patient went to his work as well as usual, and at noon came home sick, eating but little dinner. I was informed by his physician, that during Tuesday evening, he was in very much the same state as when I saw him. I found him in a stupid state, from which he could only be aroused with great difficulty, and could not answer intelligently. He was very restless, constantly tossing about. His countenance was of an ashy hue, the eyes having a dull expression; lips livid; breathing fifty respirations per minute, and upwards; pulse 130 to 140 and upwards. Heat of skin moderately increased. Tongue clean, pale and moist. The patient was very much prostrated. There was no cough. I was told that he had vomited some and had had moderate purging from the bowels without medicine. I understood that he had been exposed in his work to arsenic, which was in a color he had been using. I did not see the deceased afterwards. My inference was, that arsenic had been introduced into his system by breathing."

In answer to some questions by the coroner, with reference to the disease having been only pleurisy, and death having been caused by that, he said: "Persons are not attacked with, and do not die of pleurisy in that way."

Q. (by a Juror). "Had you been called to the deceased without any previous information of his exposure to arsenic, would you have given it as your opinion that that was the cause of his illness?"

A. "His symptoms were those produced by some powerfully acrid poison having entered into his system, and they corresponded to those of arsenic."

Q. (by the same Juror). "Have you attended cases of poisoning by arsenic before? And if so; were the symptoms the same as in this case?"

A. "I have attended persons who had taken arsenic for self-destruction. The symptoms in this case were the same, with this exception: in such cases there was more vomiting and purging; but in this case, the poison being introduced by inhalation, would explain the difference."

Q. (by another Juror; foreman of the "Block-cutting department" in the manufactory): "Do you believe, that in a room, at a temperature of a hundred degrees, where there were eight or nine persons at work, all of them exposed in the same way, to any fumes of arsenic that might arise, that one of them could be poisoned, and die, in forty-four hours, and none of the others be affected at all?"

A. "That is a thing that should be thoroughly sifted. And now, Mr. Coroner, I would ask you; have you had any chemical analysis made in this case?"

A. (of Coroner). "I—I—I don't know—I—I—directed it to be done, but have not heard—I expected it would be here."

Dr. Buck. "Well, that should have been done."

Dr. Buck was then handed a letter, which after perusing, he said:

"I am prepared to settle the whole question. I hold in my hand a letter to Dr. Griswold, stating that" (reads the letter)—

"Professor St. John, himself, examined the 'pleural fluid,' and in it clearly detected arsenic, as shown by Marsh's and Reinsch's test; also, by ammonio-nitrate of silver, and ammonio-sulphate of copper. Having to go out of the city, he did not examine the other bottles, as sufficient proof was obtained from the analyzed fluid to put the matter beyond a doubt. The students applied the remaining corroborative tests, obtaining positive signs of the presence of arsenic.

Signed, "R. F. WEIR."

Coroner. "That settles the question. That is proof positive."

William Turnbull, being sworn, says: "I worked in the same room with the deceased, putting in sticks. I was at work on green color, from 9 A. M. till night. My nose was made sore. It was sore on the next morning. It did not trouble me after Saturday. My nose bled. On the next morning my nose bled at the shop—it also bled at home. I was not sick in any other way. I have worked at the same color at other times, and it did not affect me at all."

Q. (by proprietor). "One time when you had a leisure moment, did deceased ask you to take a good sniff while he stirred up the paint, to make your nose sore quick?"

A. "Yes."

Q. (by the same). "Did you do it?"

A. "No."

Q. (also by the same). "Did deceased?" *A.* "Yes.

"The paint settles to the bottom, so that he has to stir it up when he dips it out."

March 28th, 1858.—John Hennisy (called by the proprietor), being sworn, says: "I work in the same factory as deceased, but in a different room—the curtain department. I attended the 'hanging-machine there, pulling in sticks. I have worked at this work on the green color, during the three years I have been there, seven times, I think, in all. The last time was two or three weeks at a time. I have not been sick from the effects of it at any time; I would have a rash, it would come under the arms extending to the sides of the chest, and also at the elbow-joints, and on the hands. My nose would swell a little, and break out with the rash, but not to bleed. I used to have my sleeves rolled up. I have never been affected in any other way. There was more surface to spread over than in the upper room where deceased worked. I think the upper room was the warmest. It was the same kind of color as used in the upper room, but stronger, I think, as it would cause the rash to come out sooner, causing it to come out in fine pimples, appearing on the nose first. The boys would often have a sore nose, sometimes in three or four days, and then again," (on the same one's) "in four or five days. I worked in the upper room, on the green, putting in sticks, two or three times, when it did not affect me at all. I never have known any one to quit work on account of its effects, unless it got into a sore."

Inquest adjourned to March 31st.

It is well to remark here, that it was stated by several of the witnesses, that the genitals are especially liable to be affected with the rash. I have since learned that the mouth is also made sore, affecting the gums and the edges of the tongue in particular. The feet and legs are also affected as I have been informed by a quite intelligent lad, who has himself been thus affected, and states that the above witness (Hennisy), was laid up for two weeks, at one time, from that cause. He says also, "I would get light-headed, so that sometimes I would feel as if I had no cap on, and would be looking for it when it would be on my head all the while."

March 31st, 1858.—Samuel St. John being sworn, says: "I am professor of chemistry at the College of Physicians and Surgeons. On Saturday last, I received from Dr. Griswold a bottle of bloody fluid, a portion of lung, a portion of heart, and a portion of muscle, requesting me to analyze them for arsenic; also at the same time, and by the same individual, a vial containing a greenish fluid. I examined the bloody fluid first, and obtained unmistakable evidences of the presence of arsenic. The quantity was very minute, much less than I have been accustomed to find in stomachs where arsenic had been taken. On Monday I examined the portions of lung and heart; I found less, yet decisive evidences of arsenious acid. In the portion of muscle I did not find enough to speak of, if any. The portion was very small, and the examination upon the whole unsatisfactory. The green fluid I also tested, and in this way: upon standing, the green had settled to the bottom leaving a colorless fluid at the top, which I decanted off and tested, and found abundant evidences of arsenious acid."

"Arsenious acid is capable of detection in exceedingly minute quantities. Arsenious acid may be absorbed in small quantities. I believe there is more or less arsenious acid mixed with the arsenite of copper as an adulteration, which appeared to be the case with the specimen analyzed by me. I think but very little arsenious acid would be held, or carried in vapor of water. In this particular case, from what I have heard stated here [a portion of evidence of the next witness], I should think the poison was absorbed by contact, the offending matter being the adulteration and not the coloring matter. I should not think that arseniureted hydrogen could be found in any of the processes of manufacturing and its use, as I have heard detailed here. I should not think that the quantity of arsenious acid in the body would have caused death by itself, in a healthy system. The quantity of arsenious acid found, was a very small portion of a grain. I did not go into any analysis for quantity, and therefore cannot make any estimate how much there may have been in the body."

R. S being sworn, says: "I work at the Union coloring works, No. 401, 403, 405, Cherry street. I am the manager of the establishment, and the manufacturer of the colors made by us. The light green, as it is called, we make, using blue vitriol, sal soda, and vinegar, and sometimes sulphate of iron. In this there is no arsenic. We also make another green in which arsenic enters, using blue vitriol, arsenic, sal soda,

and vinegar. I have furnished the proprietors of the establishment in question with the green colors. I do not know as I furnish all of the green colors; I have been engaged in the manufacturing of colors 11 years. I have not known any injurious effects from these colors to those employed in making them. I prepare the colors myself. We sell it in a pulp state. I presume, that which was in use when deceased took sick, came from our place, as I am told it was in a pulp state. We make 1,600 pounds from day to day, of the green, or that which contains arsenic." On being asked to describe the process of manufacturing, he said: "The arsenic and vinegar and hot water are put into one large tub, and in another the sal soda is dissolved with hot water. Then the contents of one tub is allowed to run into the other, when it fills the whole building with steam. This is pure steam, it will not hurt anybody; we breathe it freely. Then, when it settles, all of the arsenic goes to the bottom with the copper, but there will be a green liquor at the top which contains no arsenic. This liquor we draw off and get it into a pulp state—that is a thicker state—by a process which is a secret. This article we furnish to paper-hanging manufacturers. We have furnished some of this to —— (the proprietors of the establishment in question), and I suppose it is the same as in use by the deceased, as I am told it was in a pulp state. . . . When we have got this green in a pulp (the arsenite of copper which has settled to the bottom) we take it into another room which is very hot, and tight, and place it on hot copper tables, heated by steam, for drying. The heat of the room is 190°. Our men go in there every two hours, and stay one hour stirring it up and turning it over freely. Our men feel no other effects from it than weakness from sweat. The room will be filled with steam and dust. We cannot get the room tight enough to keep the steam in. After it is dried, we take it into another room and grind it in a mill, which makes a great deal of dust. We cannot keep the dust in, it will go all over, covering everything in the office with a green dust. We do not furnish this to paper stainers. I know a medicine that will cure persons if they are made sick by this color." *Question*: "Do you keep this medicine on hand?' *Ans.* "We do." *Q.* "What is it?" *A.* "Well, I take some sulphate of iron, and a little oil of vitriol with water, and give them." *Q.* "Will the pulp you have spoken of, prepared from the green liquor, dissolve freely with water, and remain so without settling to the bottom?" *A.* "It will."

James R. Chilton, residing 125 Fifth Avenue, being sworn, says: "I am an analytical chemist. I have analyzed a portion of lung, a portion of intestine, and some bloody fluid which was brought me yesterday, by Dr. Hassel. My analysis was to determine whether these contained arsenic. I tried each of the substances separately and carefully, without detecting any arsenic, by the most delicate tests. . . .

"Scheele's green, which is the arsenite of copper, and chrome green, which contains no arsenic, are the green colors mostly used by manufacturers of stained paper. Arsenite of copper will not decompose only at a high degree of heat. It is made at 212° F. Arsenite of copper would only be decomposed by free hydrogen, if such should be gene

rated in any way in its use, and I do not see how this could take place in its use by the paper manufacturers. I have long been acquainted with the manufacture of these green colors, and have never known any ill effects except with sores or a rash, which arise from local application, not affecting the system generally. It is chemically impossible for Scheele's green to be decomposed at a temperature of 100° F. There may be arsenious acid mixed with the arsenite of copper; yet were it half arsenic, it would not make any difference in the effects, as the arsenic is only thrown off at a high degree of heat, considerably above 212°. At 69° water will hold about 9 grains of arsenic in solution to the ounce, at 212°, some 69 grains. I do not think that in the process of drying, any arsenic would be carried off in the steam."

The following was handed to the coroner:

Wooster Beach, M.D., being recalled, says: "I took a portion of lung, and a small piece of intestine, from the body of James Fitzpatrick, and some blood that exuded from said lung, to my place of business, where they remained until day before yesterday. At that time I sent the blood and some portion of the lung with the piece of intestine to Dr. Chilton. I retained some of the lung, which I boiled for about three hours in water, after which I filtered the fluid obtained, and subjected it to two tests for arsenic. In neither way did I detect the presence of that metal. In the different tests employed by me, one was the insertion of a piece of copper in the suspected fluid, acidulated with hydrochloric acid and boiled. Another was Marsh's test." The inquest now adjourned till Friday.

Not dreaming but that the identity or original purity of the portions analyzed by Dr. Chilton, would be established by proof, it was felt that I was somewhat saddled with the arsenic that Prof. St. John had found. Indeed, not very careful insinuations pointing in that direction, had been made by the proprieter of the establishment; and his foreman of the block-cutting department, who, acting as juror, and at all times stating what he knew in the case, had put several questions to witnesses involving the same inference. Under these circumstances there was but one course to pursue, or be crushed, which I firmly believe was the intention from the beginning, should it be necessary, for it was thought, and so stated at the inquest, in a speech before the jury, by the proprietor, that . . . "his whole business was at stake, a business that he had been engaged in for twenty years, a business by which he had been able to keep in employ 150 men and poor boys during this whole winter, when he was scarcely selling a bundle of paper. He had fed the poor, and clothed the orphan. Would he be engaged in a business that was dangerous to his workmen? No! if this was established he would quit it at once." However true any, or all of these statements may have been, I simply could not afford to have my reputation as a physician, or my honor as a man tarnished by such insinuations; therefore the body must be disinterred, and new and undisturbed portions taken by trusty and disinterested parties, and another analysis made. The consent of the family of the deceased was obtained, and the services of his uncle for identification of the body, and of Drs. Tucker and

Furman, to select from it such portions as they should think proper, and take them directly to Prof. St. John, for analysis; the result of which is to follow.

Friday, April 2d, 1858.—Inquest proceeded with—all of the witnesses connected with the last chemical analysis present—the coroner was loth to take their testimony, but finally, after some argument, concluded to take a brief statement.

Samuel St. John, M.D., being recalled, said: "On Thursday, at half-past five P.M., I received from the hands of Drs. C. P. Tucker and Guido Furman, the following portions of the body of deceased: a large portion of the liver with the gall-bladder attached, portions of the heart and lung, the spleen, both kidneys, a portion of intestine (descending colon) and two bottles of fluid, one from the cavity of the chest, the other from the cavity of the pelvis. I proceeded immediately to analyze. The solid portions were brought into solution by boiling with dilute muriatic acid. I then filtered, and proceeded to apply the tests. The liver gave me sensitive portions of arsenic. The kidney gave the same results; the intestine gave similar results to the kidney. The fluid obtained from the heart responded less satisfactorily to the tests; from the spleen I obtained no evidences of arsenic. I have named the above results in the order of the quantities found, as near as possible. Both of the fluids responded feebly to the tests."

Drs. C. P. Tucker and Guido Furman being sworn, say: "On the afternoon of April 1st, we had the body said to be that of James Fitzgerald, exhumed, and took therefrom, and delivered in the same condition as taken to Prof. St. John, the portions designated by him. The liver and kidneys had not, from appearances, been disturbed by any previous examination."

The bladder was found by them perfectly empty.

Thos. Hearn being sworn, says: "I am uncle to the deceased, James Fitzgerald. His body was exhumed yesterday afternoon, and portions taken therefrom by the two last witnesses."

Augustus C. Booram, was then called by the proprietor, and being sworn, says: "I saw deceased on Wednesday, the 24th, about noon. I found him laboring under very great difficulty of breathing, rapid respiration, small frequent pulse, tongue pale, somewhat coated—his mother said that his countenance was about natural—somewhat anxious, restless, partially comatose, but could speak plain and intelligently. He complained of great pain in his chest; these were the symptoms. He seemed very ill—very sick. I applied my ear to the chest, hearing crepitation distinctly. The eye seemed sunken, the pupil natural. I was also present at the post-mortem examination; we found a large quantity of colorless fluid in the left cavity of the chest, near a quart. The pleura was found very much inflamed. There was adhesion (it could hardly be called so) and large quantities of (very soft) false membrane. There was considerable congestion of one lung at the posterior part. We found no other disease. The liver (peritoneal surface) seemed paler than natural. I considered deceased to be laboring under congestion of the lungs, connected with pleuritic affection. The The post-mortem showed more disease than what I expected to find. I

believe death to have been caused by pleurisy and congestion of the lungs. When I saw deceased before death, I did not think his sickness was from poison, but from congestion of the lungs. I saw the patient at the request of —— (the proprietor)."

It will be observed that this witness saw the patient during the rally ing period.

Dr. Dennison, who was present, and had been with the deceased from 11 till 12 P.M., on the first day of his illness, was now offered, but the coroner refused, saying that "he could not take any more evidence on that side. We had had Dr. Buck, and he had admitted Dr. Booram's evidence on the other side, considering it as only a fair offset —one physician on each side!" A very striking illustration of the manner in which the inquest had been conducted; for in reality it was a contest between sanitary science and the green paper interest and its ramifications. "He had admitted the evidence upon the last chemical analysis to satisfy us, because the case had assumed such a condition that a question of veracity and character seemed to be involved. He must close the case." He then charged the jury, and "assured" them that, "though Dr. Hassell had not appeared to testify to it, the portions analyzed by Dr. Chilton were portions of the deceased. But taking it as established that arsenic had been found in the body, it was unnecessary to take that into consideration in rendering a verdict, as, by the weight of the medical testimony, death was caused by disease of the lungs." He called their attention to the previous cough, the small quantity of arsenic found—though no analysis for quantity was made, and which he refused to charge—and the comparative impunity with which others had been engaged in the work (upon which he laid particular stress), and recommended them to bring in that kind of a verdict. The room was then cleared of all but coroner and jury, when he further insisted (as I have been informed) upon the same kind of a verdict, and absolutely stated that he would not accept any other, or one that connected the death with poisoning. But four of the jurors could not concur with him and the other two, and they were therefore discharged. *Yes, only the four* were discharged, or if the other two were also, then they were called to act again in the same case, for in following the result to the City Inspector's Office—inquest No. 376, for March—may be found the following verdict, rendered April 9th, 1858:

"*Verdict.*—That the said James Fitzgerald came to his death by pleurisy and congestion of the lungs: but from what cause excited the jury cannot say." Signed

"CHRISTOPHER ROBLEY [*foreman of the block-cutting department in the paper-hanging manufactory*].
"ROBERT HUMPHREYS [*police-officer*].
"JAMES CROSBY.
"CHRISTOPHER HOGAN." } Former jurors.

Also the following, viz.:—"The undersigned jurors further believe that his disease was aggravated by the arsenic found in his system.

Signed "NICHOLAS WALSH,
"JOHN FITZPATRICK."

This latter will be found upon a separate slip of paper in the writing of the coroner, showing that it was probably drawn by him, as was the case on the two previous occasions, when he drew up a verdict of "pleurisy and congestion of the lungs," and asked the jurors to sign it, presenting it especially to Mr. Robley (though he was not the foreman of the jury) for approval.

But to cap the climax of this strangely conducted inquest, we have Dr. Hassell's tardy statement, which will perhaps solve the mystery of Dr. Chilton's finding no arsenic.

Ebn. Hassell, M.D., residing at 71 West Thirty-seventh street, being sworn, says: "On Monday, the 29th ult. I received a portion of intestine, of lung, and some blood, from Dr. Wooster Beach, jr., for the purpose of procuring an analysis of the same. I took them to Dr. James R. Chilton, who promised to make the analysis. I know that the lung, etc., were the same as brought to my place by Dr. Beach, on the 25th ult. The lung and intestine were thrown into a Croton-water basin shortly after they were brought in. The blood remained in the bowl in which it was brought, all the time, until poured into a vial to carry to Dr. Chilton.

"Taken, 9th April, 1858"—the day on which the verdicts were rendered.

It is to be regretted, that the doctor has failed to state what quantity of water flowed over these portions during the four days they were in the "Croton-water basin" in his and Dr. Beach's apothecary shop. As for the "blood that remained in the bowl in which it was brought, all the time, until poured into a vial to carry to Dr. Chilton," and which Dr. Beach describes as, "came from the lung;" the inference is, that it was what adhered to the bowl after emptying its contents, and that the quantity was small, by its being contained in a vial—"a small vial," as described by Dr. Chilton. It is worthy of remark, also, in this connection, that a portion of the lung taken, was pretty well washed at the time it was taken from the body, by being immersed in a bucket of water, to teach us that congested lung would sink, and that, at our suggestion, another portion was also taken that had not been washed; and I will further say, that it was just such proceedings as this, that occasioned the fear that no *proper* analysis, if any, would be had by those whose official business it was to secure its being made. When the difficulties encountered in establishing the presence of arsenic in the body is taken into consideration, it will be apparent why more exact information as to the particular form, manner, and circumstances of its introduction could not be obtained, and the reasons why those engaged upon different parts of the work were not equally affected; but that arsenic was introduced into the system of the deceased, during the three hours he was engaged at his work, cannot be doubted; and the route through which it entered is also pretty clearly indicated.

As for the propriety and legality of such a system of conducting coroner's inquests as was manifested on this occasion, I have nothing to say at this time.

PART SECOND

CRITICAL ANALYSIS.

ART. VIII.—*The Institutes of Medicine.* By MARTYN PAINE, A.M., M.D., N. Y., 1858, pp. 1095.

Essays on the Secretory and the Excito-Secretory System of Nerves, etc. By HENRY H. CAMPBELL, A.M., M.D., Phil., 1857, pp. 135.

WE notice these works together, for reasons which will appear in the sequel. It is well known to our readers that to the above essay of Dr. Campbell, the prize of $100 was awarded by the American Medical Association, in May 1857, and that chiefly, it is understood, on the alleged ground that the author has made a most important physiological "discovery," viz: of an "excito-secretory system of nerves," and corresponding function; which is supposed to furnish a correct interpretation of many physiological phenomena, and elucidate may pathological conditions, which formerly were not well understood. This claim of the author, as it seems to us, and as will be made to appear hereafter, has been conceded in some quarters, on very slight and insufficient grounds, and with, as it would seem, a total oversight of what has been accomplished by others, and a very imperfect knowledge of the present state of this branch of physiological science.

The influence of the nervous system on the functions of other parts, is one of the most interesting, as it is one of the most ancient subjects of inquiry in medical science. Dr. Bostock has truly remarked, that a great part of the sciences of medicine and pathology consists in tracing the operation of this nervous connection between the different parts of the body, and observing the effects which are propagated to distant organs or functions by the affection of any single organ or function. It may be assumed as a demonstrated principle, we suppose, that this connection is not of that kind which we may denominate *physical*, where the change is extended to remote places in consequence of an alteration in the mechanical constituents of the body, but is to be referred to that sympathetic connection between the parts, which can be accounted for upon no other principle but the operation of the nervous agency. There are many and great difficulties connected with such inquiries. Some, owing to the very nature of the subject, and others to faulty methods of investigation. When we consider the intricacy and minuteness of structure of the nervous system, so minute as to baffle the eye of the anatomist, its ramifications extending everywhere, permeating every part, decussating and interlacing everywhere; and then, when

we observe how prone we all are to generalize our knowledge, by applying principles with which we are familiar to the explanation of new facts, regardless whether the analogy between them be such as to warrant such extension—when we consider all this, we need not wonder that the subject of the nervous function is still involved in mystery, and that the laws which regulate it are yet, perhaps, but imperfectly understood. Here is a subject, vast and recondite enough to occupy the human faculties till the end of time, and then leave extensive fields uncultivated, if not unexplored!

The nervous system not only brings the conscious mind into relation with the external world, through the medium of the organs of the senses, but it is also intimately connected with all the functions of the living body, in health and disease. What is this connection, and how and in what degree it influences them, are problems which many have attempted to solve; some, like Marshall Hall, with marked success; others, from affected knowledge and ill-constituted minds, have only succeeded in displaying their own ignorance, and involving the subject in still greater darkness. It is a grand and sublime problem to determine the extent to which purely *mental acts* are concerned in the production of bodily changes, and through what instruments their influence is communicated. Another problem, as connected with the organic functions of life, is almost of equal importance, viz.: what are the functions of the *sympathetic* or *ganglionic* system of nerves. Again, in what do *functional alterations* of the nervous system consist, since they are of a kind beyond the ken of even microscopic research? Do we know anything as yet of the nature of nervous influence? Is it within the scope of the human faculties? Can we even know anything more than the phenomena which come within the range of our observation, and the mechanism through which these phenomena are brought about? If we cannot learn the nature of vital or nervous energy, can we not learn the conditions essential to its various operations, as well as the operations themselves. But how are these to be learned? Certainly in part, at least, by studying the properties of the organs which it immediately influences, and this is the plan which the author of the "*Commentaries*" and the "*Institutes*" has everywhere pursued, and which has enabled him to build up the most complete, perfect, and rational system of nervology yet given to the world—a system consistent with and reconciling all known facts and phenomena; harmonious in all its parts; and throwing equal light on physiology, pathology, and therapeutics. This, we doubt not, will be deemed extravagant praise by some, but it will be borne out by a candid examination, and sustained by the award of posterity.

Dr. Paine has entered far more extensively into an analysis of the *vital properties* than any other writer, while, at the same time, he has set forth highly original views as to the character and office of the nervous power, and as to the mode in which this power participates in the operation of remedial and morbific agents, and moreover, clearly shows, that in proportion as philosophy departs from the deductions which are founded on the phenomena of living beings, in the same ratio

must it be fundamentally false, and the unavoidable cause of practical errors of the highest moment.

Vitalism, so called, lies at the foundation of all his writings. He believes it to be founded in nature, "because it is consistent throughout; because it seeks no multiplication of causes, but serves as an impregnable and universal foundation for every fact and every rational principle in physiology, pathology, and therapeutics;" and therefore uniting all the principles relative to life, health, disease, and the art of medicine, into one concentaneous, harmonious whole. Our author does not undertake to investigate the nature of the vital principle, being satisfied with demonstrating its existence, and showing that organic beings are governed by laws peculiar to themselves.

We are, however, more particularly concerned at present in inquiring whether Dr. Paine has recognized an "*excito-secretory function*" (which is now claimed by several as a new "discovery" on their part), and how far this enters into his theory of the functions as connected with the causation of disease and the *modus operandi* of remedies. We believe that a very superficial examination of the "Institutes" will satisfy the reader that our author not only recognizes such a function, but that it lies at the foundation of his whole system, and enters largely into all his explanations regarding the operations of the healthy functions, the causation of disease, and the operation of medicines. To make this appear, we shall have to quote somewhat largely from the "*Institutes*," and from the essay "*On the Modus Operandi of Remedies*," published as early as 1842.

We may premise, however, by presenting the claims of Dr. Campbell, which have, as we have stated, been allowed by Marshall Hall. The first thirty pages of the essay is occupied with an account of the anatomy and well-known functions of the two grand divisions of the nervous system, the cerebro-spinal and the sympathetic, as presented in all our standard works on physiology. Indeed in this part there are no statements made but what are perfectly familiar to all who have perused any recent treatise on this branch of science. In the second portion of the work (p. 94) the alleged discovery of Dr. C. is thus set forth:

"The cerebro-spinal system has been subdivided into two portions, viz., the nerves of sensation and those presiding over muscular action. A *relation* has been discovered to subsist between these two portions of the nervous system, by virtue of which the sensory nerves have been found to act as excitors to the motory; and hence this system has been termed by Dr. Marshall Hall the *excito-motory* system of nerves. Now, as we hope more fully to set forth in the present discussion, these same sensory nerves are not only excitory to the *motory* system, but, under certain circumstances, most of them sustain an analogous relation to the *secretory* nerves, exciting them and modifying their action, diminishing, increasing, and altering the secretions, according to the extent and character of the excitation applied. It will be our object, then, to show that the sensory nerves, or, at least, some of them, sustain to the other two portions of the nervous system a *double* relation; first, excitors to the motory system, giving rise to the excito-motory system,

ascribed by Dr. Marshall Hall in 1837 ; and, secondly, excitors to the *secretory* system, resulting in the *secretory system*, enunciated first in this country in 1850, and which second system Dr. Marshall Hall did not appear anywhere to recognize until the present year" (1857).

The writer then, in establishing the proposition of the excito-secretory function of the nervous system, refers to the influence of cold to the surface over the urinary secretion. Rejecting the hypothesis of an antagonism existing between the cutaneous surface and the secretory surfaces of the kidney, or the bowels, Dr. C. gives *reflex action* as the true explanation.

"We irritate an excitor nerve," he remarks, "and we stimulate muscular contractions, evidencing the existence of the excito-motory function. The excitor, or sensitive nerves, having received an appropriate stimulus, excite, through the medium of the spinal centres, the action of those gangliæ and filaments dominating the secretory organs in question ; they control, as we have seen, their circulation ; they preside over their secretion; and thus stimulated, they are excited to modify the circulation and the secretions. So far this is a normal act, the result of that ordained and wholesome commodation established between these two portions of the organism through these two systems of nerves —the sensory and the secretory; but should the excitation be unusually strong, amounting to what is properly termed a 'shock,' or too prolonged, we find the secretory system acting unduly ; and this action is then carried to an abnormal extent ; the *dynamic* act so modifies the circulation that secretion becomes aberrated, or even arrested, and perhaps a change in the condition of the tissue, from altered nutrition, may result. Dr. Marshall Hall thus remarks upon this subject : 'A partial, keen current of air falling on *any* susceptible portion of the skin may induce inflammation in any susceptible internal organ. An extensive burn or scald is apt to induce pneumonia.'"

This explanation the writer claims as original with himself ; for he says (p. 96) : "It is in this way, then, viz., by the doctrine of the excito-secretory function of the nerves, that the above familiar, though, *until a few years past, mysterious phenomena, have received their interpretation.*"

In order to illustrate the theory of excito-secretory action still further, Dr. C. selects the *fifth* pair of nerves, which has extensive connections with the ganglionic system, which is distributed to parts endowed with exquisite sensibility, and originates from that portion of the cerebro-spinal axis, which exercises a more extensive influence over the vital processes of the organism than any other one portion, viz., the medulla oblongata. The first illustration is drawn from the influence exerted on the conjunctional surface of the globe, by a draft of cold air, or a mechanical irritant, occasioning, first, an increase of the secretions, and secondly, congestion and inflammation. The explanation, of course, is, that the branch of the fifth nerve distributed to the eye, becomes excitor through the spinal centre, to the modifications in the circulation, secretion, and nutrition of the eye-ball, which acts are under the immediate reign of the ganglionic system, fauces, affections of the nostrils,

pharynx, etc., are illustrated on the same principle. Diseases of the eye caused by dental irritation, are also specified as belonging to the same category. The influence of dentition in producing spasms and convulsions, bowel affection, cutaneous diseases, etc., is explained in the same way, accompanied by the following remark :

"Now, for these concomitants of dentition" (above named) "*there had never been presented any rational and satisfactory explanation, until they were referred to as illustrating the doctrine of excito-secretory action in* 1850."

In noticing the influence of dentition over the urinary secretion, Dr. Campbell refers to the origin of the trunk of the fifth, or tri-facial nerve, *beneath the floor of the fourth ventricle*, as traced by Dr. Alcock,* and confirmed by Soemering, and then, in connection, quotes the well-known experiment of Bernard, viz., inducing *artificial diabetes*; an exaggeration of the hepatic (saccharine) and the renal secretions, by pricking the floor of the fourth ventricle, from which we have seen the fifth pair of nerves originates; thus proving experimentally, that irritation of a spinal centre is competent to excite and to modify the secretory function of the abdominal viscera—"This fact," says Dr. C., "thus proved in *experiment* by M. Claude Bernard, *the records of American medicine will show, was recognized and announced from observation* in June, 1850. In M. Bernard's *experimental* investigation, the irritation was directly applied to the nervous centre ; in the induction from *observation, peripheral* irritation through the dental branches of the fifth nerve was recognized as competent to excite the secretion, and modify the products of secretion—the *observation* here, and not the more recent *experiment*, was the real parent of the principle of *excito-secretion*."—(p. 105.)

Dr. C only alludes to one more set of pathological phenomena, as peculiarly illustrative of the excito-secretory function of the nervous system, viz., the aberrations of secretion so often found connected with attacks of *hysteria*, such as limpid urine, profuse sweats, and salivation ; all these include *all* the facts, observations and illustrations of a pathological kind which are brought to sustain the doctrine.

Now, we are not disposed to deny that Dr. Campbell believes he has discovered an important function, one not hitherto known to physiologists ; we are not inclined to dispute his claim to the merit of being a sincere and ardent cultivator of medical science, and an accurate observer of disease, but when we are asked to recognize him as the discoverer of a "new system of nerves," or a new function, we must be excused; indeed, we might admit his claim to priority over all others, but only so far as his information extends, but then we must insist that his information seems very limited. So far as there is any merit in the name "excito-secretory system of nerves," we are willing to give Dr. C. the credit of it, but then we should insist that the term is a misnomer, and that it conveys an erroneous idea, inasmuch as it does not at all regard the *depressing* and *alterative* influences of reflex action, so clearly and fully elucidated by Prof. Paine. The examples presented by

* *Cyclopædia of Anatomy and Physiology.*

Dr. C., and referred to above, are either the same, or slight variations of those given by Dr. P., while the latter are of every variety and shape, and carried into all physiology, pathology, and therapeutics. The former, we hesitate not to say, has not a single statement relative to the different orders of nerves, and of the relations of the cerebro-spinal to the ganglionic system, which are not much more distinctly and amply set forth in the "Institutes." There is nowhere to be found in medical literature, nor in all medical works extant put together, so full, so complete, so accurate an exposition and elucidation of the functions, and the paramount importance of the *ganglionic* system in influencing all the organic functions, (including *secretion*), physiologically and pathologically, as is contained in the "Institutes" and other writings of Dr. Paine. An examination of the "*Index*" of the "Institutes" alone, will prove this. Fifty such essays as this of Dr. Campbell could be compiled from the "Institutes," and then leave material, facts and illustrations enough for as many more, and embodying and setting forth the same doctrines.

We have criticised the name "*Excito-Secretory System of Nerves*," as conveying an erroneous and imperfect idea, inasmuch as it evidently expresses only a part of the influence, mostly the natural, physiological, while it leaves untouched the *alterative* and *depressing* influences, about which pathology and therapeutics are concerned, as well as the *nutritive* influences, and the simply fluid products; all of which are of equal importance, and are all embraced within the functional range of the same system of nerves.

We shall now proceed to set forth the views of Dr. Paine on this subject, as contained in the "Institutes" and the "Commentaries" as long ago as 1840, and which must long since have been familiar to very many of our readers. In doing this we shall draw largely upon his own words, as containing the best expositions of his doctrines, and shall substantiate any statements we may make by distinct quotations.

The author then endeavors to show that the functions of organs in the organic life of animals are carried on like the analogous ones in plants, by properties inherent in all parts, and that the nervous power or nervous influence contributes nothing more towards the functions of the nutritive and other secretory vessels than that of exerting a modifying, or exciting, or depressing influence upon them, through which the products are perfected in their character, or increased, or diminished—that these instruments of life are constantly liable to preternatural influences of the nervous power, and of an endless variety, and that there is no function in the natural state of the body, no condition of disease, no action of remedies in which the nervous influence does not participate; while organs in their compounded condition are more manifestly under its perpetual harmonizing influence, through the impressions made upon their minute structure. The author everywhere contends that the nervous influence is merely an *exciting* or *modifying* cause of the organic functions, and whenever he speaks of that influence as a *cause* of certain effects, or objects to its application as a *cause* of any of the processes of life, he always means in the former

case that it influences the processes of life, and in the latter, that these processes are carried on by causes or properties inherent in all parts.

In applying these doctrines the author makes distinct, explanatory, anatomical specifications of the mechanism through which the nervous power operates in its function of *reflex action*, for the purpose of applying it to the interpretation of the modus operandi of all remedial and morbific agents upon parts beyond the seat of their direct operation, and also of its limitation in other cases to the motor nerves, and as the cause of all the physiological changes in the solids, and of all increased or otherwise modified secretions in parts not the immediate subjects of other agents through its various influences upon the instruments of organic processes, and of its modifications according to the nature of its exciting causes, as well, also, as proving the substantive existence and self-acting nature of the soul and principle of instinct, numerous quotations could be given in proof of these statements. A few, however, must suffice.

"Sympathetic sensibility appertains to what are denominated the sensitive nerves, and the sensitive fibres of compound nerves, which are also in part, the instruments of common sensibility. But a remarkable anatomical distinction, and which goes far to sustain the variety of sensibility which is here indicated, is found in the sensitive fibres of the sympathetic and pneumogastric nerves, which possess in the most exalted degree, the power of transmitting organic impressions to the nervous centre, but which are nearly destitute of common sensibility. Indeed, it is through this system of sensitive fibres that the organic department maintains the specific relation of its several parts."—*Inst.*, p. 102.

"The impressions transmitted through sympathetic sensibility may be received either by the brain, spinal cord, or certain parts of the gangiionic system, and either connectedly or independently of each other. When thus received by their nervous centres, they give rise to a development and transmission of the nervous power through what are called the motor nerves, and terminate in those influences which complete the functions of sympathy," etc.—Page 102.

"The operation of the nervous power is excited through the medium of sympathetic sensibility. This complex process results in the true function of sympathy. Impressions are made by physical and moral causes, by disease, etc., upon the foregoing varieties of sensibility, and according, also, to its different modification in different parts, and the nature of the operating causes. The impressions are then communicated to the cerebro-spinal axis, or to other central parts of the nervous system, and these bring into operation and variously modify the nervous power. The power, thus developed, thus influenced, or so modified in kind that it partakes of the nature of the transmitted impressions, which are more or less coincident with the virtues of the remote causes, is then exerted, through the motor system of nerves, upon the organic properties of distant parts, or of the nervous system itself, by which those properties and their resulting functions, and products, are

variously affected according to the foregoing circumstances," etc. —Page 108.

"It is an important law that the nervous power is variously influenced in its morbific and remedial action by slight variations in the intensity of the operating causes, whether a moral or physical; though a determination is simultaneously given to its action by the numerous other conditions already mentioned, and which may happen to be present. Thus an impression from cold, as a blast of air, or a drop of cold water, upon the skin in syncope, will rouse the respiratory organs. Another impression from the same, and under other circumstances, *will excite catarrh, or pneumonia, or articular rheumatism.* One degree of impression upon the stomach, by tartarized antimony, will determine the nervous power upon the respiratory muscles (as will cantharides upon the bladder, or mercury upon the salivary glands), and vomiting is the consequence; while it simultaneously reflects the same power upon the skin and other organs, and of which perspiration, etc., is a consequence. In smaller doses, the respiratory movements are not affected, but only the condition of the skin, etc., and in lesser degrees. But these examples embrace only certain parts of the influences in each case; while in others they are far more complex, one sympathetic result becoming the cause of others, till, through a single impression upon the skin, various circles of morbific or remedial sympathies may be instituted."—Page 109.

Under the head of "Counter-Irritants," Dr. Paine remarks: "Here is opened to us a display of those sympathetic processes which take their origin in cerebro-spinal nerves, along with the sensitive fibres of the sympathetic, and terminate in the motor fibres of the ganglionic system."—Page 643.

Again: "When remedial agents operate, a specific impression is transmitted to the cerebro-spinal axis, the nervous power more or less modified in a corresponding manner, and from thence reflected through other nerves, or other fibres, to the same or other parts, and according to the nature of the modification, disease will be produced or mitigated in those parts. However complex and variable, therefore, the phenomena, nothing can be more simple than the principle through which all those changes are produced."—Page 667.

It has been objected that the author uses the term *sympathy* in a loose, general and undefined sense, but such objection can only have been made by those who are unacquainted with his writings. He repeatedly defines the sense in which it is used, as in the following passages:

"Remote, and probably, also, contiguous *sympathy*, are conducted by the nervous power through the medium of the cerebro-spinal and ganglionic systems," etc. He uses the terms *remote, contiguous,* and *continuous* sympathy, the first two representing everywhere *reflex action* of the nervous system; the last having no manifest connection with that action, but probably influenced by the nerves, so far as they form a component part of the various tissues. Under the general term *sympathy*, for want of a better, he arranges the laws of *reflex action* and

the numerous experiments brought to their illustration, and introduced evidently for the purpose of applying them to pathology and therapeutics. In short, the terms *contiguous and remote sympathy* are but terms of brevity, whose generic name is derived from that of the nerve which, with the pneumogastric, is the principal channel through which *reflex actions* of the nervous system are conducted ; and the only distinction he makes between them is in limiting the former more particularly to the cerebro-spinal axis, as the central parts for *reflected* actions, while contiguous sympathy is manifested more particularly through local centres, which, it is stated, may consist of either the gangliæ of the sympathetic nerve, or of plexuses of nerves, or of some portion of individual nerves, as has been recently experimentally ascertained. It is, however, represented as being always associated more or less with *reflex* actions conducted through the brain and spinal cord, as manifested in the action of vesicants and leeches, when applied over some internal inflammation, dilatation of the iris, etc., etc. Our author sometimes uses the term *indirect action*, as well as *sympathy*, to denote *reflex action* of the nervous system ; while the term direct is used in interpreting the modus operandi of the will and mental emotions, and of the nervous influence as excited by affections of the nervous centres, and for expounding, along with reflex action, the modus operandi of loss of blood, and for demonstrating the substantive existence and self-acting nature of the soul and instinctive principle, etc.

Dr. Paine not only makes *reflex action* the basis of his therapeutics, but maintains that its application to the modus operandi of all remedial and morbific causes is founded upon natural laws—that if there be anything in the consistency of nature, or in facts, the same physiological laws which govern the organization of the animal kingdom in its normal state, are equally at the foundation of all its deviations from the natural standard—that this universal principle embraces completely the physiological laws of the nervous system, which is demonstrated by a multitude of exact coincidences between the results of natural causes and those of a morbific and remedial nature, both physical and mental. *Reflex action* is everywhere represented throughout the " Institutes" and the essay on " *The Modus Operandi of Medicine*" (1842), as the immediate and universal exciting cause of all the effects of morbific and remedial agents beyond the seat of their direct operation (as emetics, cathartics, diuretics, diaphoretics), acting through its influences upon instruments of organic processes. He maintains everywhere that the influence of reflex action upon the organic properties is the cause of all *increase or diminution of the secretions*, as well as all other changes that may befall them, when not the immediate consequence of the direct local operation of other laws, as in vesication, etc. He applies it to elucidate the function of respiration, the action of emetics, cathartics, bloodletting, suppositories, the seton, alteratives (when its slowly progressive operation is clearly set forth), the action of cinchona bark, etc. etc. While he demonstrates the entire dependence of respiration on reflex action of the nervous system, as the stimulus of the muscular mechanism, he shows the dependence of the act of vomiting on the

same causation ; and this is carried through a long chain of analogies, consisting of the various modifications of respiration, of vomiting, as produced by emetics of various kinds, by loss of blood, by tickling the fauces, tobacco applied to the soles of the feet, by pregnancy, by shock of falls, etc., and by mental emotions. The author explains the philosophy of *metastasis* and *revulsion* on the principle of *reflex* action, and alleges it to be the cause of all violent disturbances and convulsions, a large proportion of which, he maintains, depend on simple irritations of comparatively unimportant parts, while they supply a fertile analogy for his interpretation of morbific and remedial causes ; physical and mental. He also states that it influences the production of animal heat, which, he endeavors to show, is a *secreted* product, and rests upon common ground with other *secretions.*

We shall now present a few quotations from the essay on " *The modus operandi of medicines,*" (1841), part of the " Institutes " devoted to *Therapeutics* " in further proof of the above statements. Beginning with the position, that remedial agents operate upon the same principle as the causes of disease, viz. : by reflex action, Dr. P. remarks—

" The brain and the spinal cord are the great centre of the nervous power, and the nerves of animal and organic life, especially the latter, are the media by which the impressions of morbific or remedial agents are transmitted to the great centre, and through which the nervous power is radiated abroad upon all parts of the organism."—*Essay,* etc. 1841, p. 42.

" It is through this principle that *emetics* and *cathartics* produce their most sensible manifestations, and the same is concerned in all their influences upon other parts."—*Loc. Cit.* p. 44.

" The examples of sympathetic influences, through the *reflex action* of the brain and spinal cord are almost endless, as they also are in every part of the animal organism."—Page 44.

" When an emetic operates, the impression upon the stomach is transmitted to the brain and spinal cord, through the pneumogastric and ganglionic nerves, the nervous power developed and reflected upon respiratory nerves, whilst another current descends along other fibres of the pneumogastric to the muscular tissue of the stomach."

" If the emetic operates also as a cathartic, impressions are transmitted from the intestinal mucous membrane to the cerebro-spinal system, the nervous power developed and modified according to the nature of these impressions, and radiated abroad as when the result of the action of the emetic upon the stomach," etc.—Page 46.

The author becomes truly eloquent in describing the phenomena of vomiting, its physiological and curative effects, through *reflex* influence, calling particular attention to its effects on the surface—bathing it in perspiration, causing saliva to flow from the mouth, starting a current of bile, and an equal effusion from the intestinal mucous membrane, etc. ; in short, furnishing an example of *excito-secretory* influence, which none can gainsay or dispute. We would like to quote the whole passage did our limits permit ; we can only refer to it, as the most graphic and accurate description of emesis, in all its relations, to be found in the language, and the author follows it up by remarking—

"The foregoing may be taken as an example of the *principle* which concerns the *modus operandi of all curative or morbific agents*, whether physical or moral, and of all the developments of disease that arise as sympathetic consequences of each other."—*Loc. Cit.*, p. 48.

Again: "The nervous power is not only nervously excited, exalted, or depressed, or modified in its kind, and produces influences upon remote parts according to these changes, but it is *reflected* upon particular parts according to these existing susceptibilities, the nature of the remote cause, and the part upon which the remote cause may operate. Thus, one impression from cold, as a blast of cold air, or a drop of cold water upon the skin, will rouse the respiratory muscles. Another impression from the same cause will excite catarrh or pneumonia, or articular rheumatism. Mercurial ointment will determine the nervous power, specially upon the salivary glands and liver; and the same effects arise from the action of mercury upon the stomach. Cantharides, internally, or externally applied, irritates the neck of the bladder," etc.—Page 52—1841.

This philosophy is in accordance with the anatomy and physiology of the nervous system, as laid down in the "Institutes."—Page 55.

"The cerebro-spinal nerves, and the sympathetic interchange contributions, in all parts, by which important influences of the former are established in the organs of organic life."—*Loc. Cit.*, p. 55.

"The sympathetic system is added especially to the organic life of animals, on account of the complexity of the organs, and to invite them in harmonious action, through circles of sympathy, and thus render them, each in its place, conducive to a common end. The cerebro-spinal system contributes to this result; and each system, unitedly, or independently, exerts special influences on the specific actions of organs, though these actions are carried on essentially through properties inherent in the several tissues."—Page 55, *Inst.*

These quotations will suffice, and more than suffice, to establish one point, viz.: that whatever of reflex function has been recently claimed by others, as novel, or a new "discovery," forms the very groundwork of Dr. Paine's writings, and is everywhere made the leading principle in his philosophy. He everywhere teaches that *secretion* and *excretion* are influenced by direct and *reflex* action of the nervous system upon their immediate instruments, when they will be simply increased or diminished, or, what is greatly more important, variously *altered*, or new ones generated, according to the manner in which the nervous power may be modified by the causes which bring it into preternatural operation, both physical and mental. The fluid products of glandular organs, sweat, saliva, gastric juice, etc., with their various modifications, though generated by the organic mechanism through its own inherent properties, are also shown to be controlled and modified by nervous influence, especially *reflex*, whether excited by physical or mental causes. If, after all, any doubt remain, whether our author recognizes any excito-secretory function, let him turn to what is said regarding the *seton* (pp. 679, 681, *Inst.*), where will be found a clear and comprehensive account of the whole philosophy of the alterative influence of *reflex action* of the nervous system, as the medium through which all the modifications of

secreted products are brought about, and as exemplifying all that is even concerned, according to the author's views, in the modus operandi of remedial and morbific causes upon parts beyond the seat of their direct operation.

It will be seen that our author not only everywhere recognizes all *excito-secretory function* but also all *excito-secretory system of nerves;* he also gives distinct anatomical specifications, as regards the mechanism through which the reflex influences are brought about. His theory is comprehensive and philosophical, based on anatomical structure, and physiological function, and embracing all known phenomena, including pathological and remedial influences. It is a consistent theory, based on recognized facts, and binding, in harmonious relation, the diversified facts relating to healthy and morbid action and the modus operandi of remedies. It is not *partial,* like the theory of Campbell and Allen, explaining a few phenomena only, but leaving all the most important a *terra incognita;* nor does he fall into the error of naming an entire system of nerves, from one of its functions, viz. *secretory,* but gives to all its functions, each in turn, its due importance, depressing, and alterative, etc.; weaving all facts and all known phenomena into a beautiful and philosophical system, which will stand as a monument of the author's genius and learning as long as medicine shall be cultivated as a science.

Dr. Paine nowhere claims that he discovered these causes of the nervous system which he has so successfully applied to the elucidation of disease, and the operation of remedies; for he was aware that *excito-secretory action* had been noticed by Bichat, and fully established by the experiments of Wilson, Philip, Henle, Peipers, Muller, Dr. Reid, Krimer, Humboldt, Brodie, and others many years ago. In Muller's Physiology, in the chapters devoted to a consideration of the "Laws of Action of the Sympathetic Nerve, and the Propagation of Impressions in it," "Of the Peculiar Properties of Individual Nerves," "Of Sympathies," etc., will be found all the various laws of nervous action and function hitherto discovered; but it may be safely claimed, in behalf of Prof. Paine, that these physiological laws were first successfully applied by him to pathology and therapeutics—we mean in their *totality.* Marshall Hall had, it is true, been laboring for several years upon the *excito-motor* phenomena and applying them in the elucidation of healthy and morbid function. But Dr. Paine was the first to explain fully the philosophy of the operation of the nervous power in producing motion under all its various aspects, as manifested in its natural regulation of organic actions in the phenomena of sympathy induced by morbific and remedial agents, or by the influences of disease in the motions which are generated in the organs of organic life, by the passions and analogous affections of the mind, in the movements of the voluntary muscles in the production of sudden death from all causes, and the physiological interpretation of the recognizable laws of sympathy, and their general introduction into pathology and therapeutics; all this was first attempted, and, we think successfully accomplished by the author of the "Institutes," and if any one chooses to borrow from him sufficient material for a "prize essay," it will hardly be missed, and the author can well

afford, from his abundant riches, to spare thus much, and still have enough left to supply the cravings of any ordinary ambition. It is true, astonishing as it may seem, that through all the laws of nervous action, or by "sympathy," as used by our author, that are necessary to the full interpretation of the remote effects of morbific and remedial agents, are as well established perhaps, as any in physics, they had not been extensively applied to these important objects before the work was attempted by Dr. Paine; and what is more, those philosophers who have contributed most to their critical expositions, have overlooked their most important pathological and therapeutical bearings, and neglected to apply the nervous power in a philosophical manner to our explanation of the natural phenomena of sympathy. This work, however, has been wrought out by our author with an amount of learning, industry, intelligence and success, that cannot but command our highest admiration, and yet Marshall Hall has stated (*London Lancet*, May 2d, 1857) that "the *idea* and the *designation* of excito-secretory action belong to Dr. Campbell;" though he says "the elaborate *experimental demonstration* of reflex excito-secretory action, is the result of the experimental labors of M. Claude Bernard," while his "own claim consists in the vast *generalization* of the excito-secretory action throughout the system." Dr. Hall is very careful not to recognize any "excito-secretory *system of nerves*." As to the opinion, that Dr. Campbell "first detected the excito-secretory function," our readers can now form their own opinions after what has been stated above.

In conclusion, we ought perhaps to make some mention of the claims of Dr. J. A. Allen, of Michigan, who feels aggrieved by the adjudication of Marshall Hall, and accordingly enters a *demurrer* in the following terms:

"What *I* claim is the great generalization, that excito-influence is followed by a reflex change, in which the effect is not a *motion*, but *a modification of vascular and nutrient action*. That this takes place by means of the *double nervous arc*. A vast number of therapeutic phenomena are thus experienced."—*The Medical Independent*, Sept., 1857, p. 383.

Now, when we consider that Dr. Allen attended the lectures of Dr. Paine in 1845, where he must have heard the doctrine of *reflex-action* discussed in all its bearings, physical, pathological, and therapeutical, and especially its relation to the modus operandi of remedies, embracing its influence and secretion, nutrition, etc., we shall be led to admire, at least, the modesty of such a claim, if not its justice. Dr. Allen is very careful to state that he has never read Dr. Paine's writings (we should think better of him if he had), while, at the same time, he ventures to criticise them, and charge him (Dr. P.) with opinions he never held. For example, Dr. A. represents Dr. P. as adopting the doctrine of Stahl in regard to the vital principle, whereas Dr. P. combats it throughout. Stahl represents the "*rational soul*" to be the vital principle; Dr. P. maintains that we are ignorant of its nature; that "it is practically useless to investigate its nature," etc. Had this charge been brought against Marshall Hall, it could have been supported by

ample proof from his writings, as in the following passage from his work on "*The Nervous System*:"

"The principle of action in the cerebral system is the ψυχή, or the *immortal soul.* Upon the cerebrum the soul sits enthroned, receiving the ambassadors, as it were, from without, along the sentient nerves; deliberating, and willing, and sending forth its emissaries and plenipotentiaries, which convey its sovereign mandates along the voluntary nerves to muscles subdued to volition."

The other charges of Dr. Allen are no better founded than this one. All his originality consists in the use of the term "*double nervous arc!*" in place of reflex action; and he is entirely welcome to any credit which may accrue from the "discovery." Dr. A. may possibly think his views were original; but where they do not strictly coincide with those of Dr. Paine, they are simply obscure and unintelligible. The physical explanations in regard to the *manner* in which alterative, secretory, and other effects are produced by reflex action, are purely hypothetical, and not capable of proof. If the author thinks that any fame is to accrue from labors in this direction, we fear he will be disappointed. The same hypothesis has been supported by Wilson Philip and others, and is now well exploded. It has not vitality enough for rejuvenation.

As to the author of the "Institutes" and the "Commentaries," he can well afford to bide his time. His fame is secure. It will grow brighter with time. The profession will delight to cherish it, and to do him honor. They will not allow a single particle of his just merits to perish, or to be appropriated by others. Posterity will vindicate all his just claims, and assign his rank among the great minds of our country. But few properly appreciate or are even acquainted with the extent of his Herculean labors. None but those who have labored in the same field can justly estimate the vast range of his learning. With slight variation, we may adopt, in regard to him, the language of Dr. Watson, as applied to Marshall Hall. We must, in passing, pay the tribute due to one indefatigable laborer in this department of science, whose sagacity has enabled him to seize the clue, and, in a great measure, to unfold the mazes of the labyrinth in which the physiology of the nervous system has been so long entangled. Dim and uncertain glimmerings appear in the writings of bygone authors; but it was never clearly discerned, and plainly stated, and successfully applied to the elucidation of disease, and the operation of remedies, until the publication of our author's interesting researches into the functions of the nervous system. C. A. L.

ART. IX.—*Materia Medica, or Pharmacology and Therapeutics.* By WILLIAM TULLY, M.D., vols. i. and ii., pp. 1534. Published by J. Church, M.D., Springfield, Mass., 1858.

THIS is an original work, and presents a new system of materia medica. That there is room and necessity for great improvements in this science has long been perceived and felt by those who have given close attention to it. The obvious imperfections in all our systematic arrange-

ments of it, their want of fitness, consistency, and naturalness, and its consequent lack of principles, which are so necessary to guide us in our efforts for its improvement as well as in its practical application, have led some to the opinion that nothing short of an entire re-arrangement of it would prove adequate to its wants. On the other hand, an opinion has arisen in some quarters recently somewhat adverse to this, viz., that the best way of managing the sick is to dispense with the use of drugs as much as possible, or that the perfection of medicine will come, when the use of medicines will be entirely, or very nearly, dispensed with. It can hardly be impertinent to suggest that the rise of this latter opinion may have some connection with the truth of the former; or that our want of faith here, as elsewhere, may be attributed to our want of knowledge. But be this as it may, those who may consider it safe and proper for us to continue our efforts for the improvement of materia medica till the good time coming arrives, and especially those who are earnestly in favor of our doing so, will welcome an original treatise upon it; nor will they consider their time as misspent in examining a revision of the whole subject, so thorough as that which is contained in the work before us.

The name of the author has long been familiar to physicians and to men of science in almost every department of knowledge. It has been more favorably known to scientific men outside of the profession, however, than to the profession itself. This may be accounted for, perhaps, without derogating from his merits as a physician, or the value of his labors for the advancement of medical science, his favorite pursuit. The reception which "Miner and Tully's *Essays on Fever and other Medical subjects*"—of which he is supposed to have been the principal author—met at the hands of the profession some thirty-five years ago is well known to some of the older physicians. Nothing could have been more acrimonious than the reviews of that work; and yet it is worthy of special remark that, notwithstanding the almost universal rejection of the principles and practice it inculcated, both have come to be adopted, to a considerable extent, if not very generally, in Europe and America; as evidence of which we need only refer to the efforts now and then put forth in these latter days, and on both sides of the Atlantic, to restore the use of the lancet in the treatment of febrile diseases. Besides the high character as a man of science universally accorded to him, he is admitted, by his most zealous opposers in medicine, to have "a mind of a peculiar cast; original, inventive, self-relying, comprehensive, deductive, and inductive;" and the work before us will bear evidence that it has all these characteristics. The unprejudiced inquirer, therefore, will ask whether this might not have been an instance of one's coming to his own and his own's receiving him not.

But there is reason to believe that this work on materia medica will meet less opposition, and be received with more candor and liberality; and this is the more to be hoped for from the fact that even a cursory examination of it is sufficient to show that it is one of no ordinary production, and, in some respects, of no ordinary merit. It is thoroughly original, strictly philosophical, displays great learning and

research ; is free from theories and speculations, and reformatory in its tendency. It evinces a mind in the author possessing great facilities for scientific attainments, and a high appreciation of the substantial fruits of learning, rather than its beauties and refinements—awake to the great interests of the profession, though in sympathy with but few of its leading influences. It is calculated to instruct rather than to please; to excite thought and a spirit of investigation, rather than pride and satisfaction at the present state of our knowledge. By the practical man, it will be read with profit and instruction, however widely he may differ with the author on some points, and whatever fault he may find with his style, his manner or his spirit ; or whatever complaints he may utter at the extra labor he finds imposed upon him. As an illustration of the true *modus investigandi*, it is especially worthy of a careful and attentive perusal. The author writes obviously from experience ; but his experience has been different from that of others. The objects he has aimed at have been different, and consequently there is novelty in his means of attaining them. As here presented, it has novelty sufficient to arrest the attention of any one who is capable of becoming interested in a subject that has too long been regarded as intrinsically dry and uninteresting.

The justness of the foregoing remarks will appear upon a thorough examination of his classification, which would be worthy of such an examination, though there were nothing else in the work to merit attention. Passing over the several introductory essays in which are exhibited the same originality of thought and reasoning, and, instead of theories and speculations, the same rigid adherence to a rational discussion about facts, that are to be observed throughout the remainder of the work, we come to this subject of classification. The utility of no science can be fully comprehended till it has been perfected; in other words, till the subjects it embraces have been classified and arranged, and upon true principles. Science derives little aid from classification founded upon principles not essential to it. Its subjects may be treated of alphabetically, but such an arrangement has no tendency to develop its principles, or to facilitate our discoveries. Hitherto our labors for the advancement of materia medica have been less amply rewarded than they would have been had they been rightly directed. The proper place for every new fact should be known, but no proper place for it having been provided, it cannot assume its due importance, and is liable to be forgotten. And besides, our knowledge of the proper place for a fact is often the very thing that leads to its discovery. Notwithstanding the able systematic works upon the subject already produced, materia medica can hardly be said to have been yet reduced to a science, unless the attempt made by the author of this may be regarded as successful.

Again, the necessity of classification anywhere is generally in proportion to the inherent difficulties attending it, which in materia medica are very great, to be sure, but have too long been looked upon as insurmountable ; and hence we have numerous treatises upon it that discard all classification—at least all founded upon any principles of materia

medica—as impracticable and worthless. It should be no marvel, therefore, if it is seen by those who have given close attention to it, that our present knowledge of materia medica is confused and imperfect, and that we have comparatively few principles to guide us, either in our labors for its advancement or in our application of it to the purposes for which it is intended.

However skeptical our readers may be upon this subject of classification, therefore, if he rejects a true one when presented to him, the next step most proper for him will be to take his place outside of a profession called scientific, and among those who do the same thing. The line between scientific and regular and irregular physicians, should be correctly drawn, and the importance of its being drawn where it should be, is not in the least affected by the question so often asked, nor in whichever way it may be answered, whether the irregular ones are not as successful in practice as others, *at present.* Physic will answer its ends when reduced to a science, and when the science has been perfected. The obstacles may be many and mighty, but should not prevent us from keeping our faces in the right direction.

He who proposes a true classification for the materia medica, therefore, will deserve well of the profession. Not materia medica alone, but medicine as a whole. The interests of the profession, and of humanity will be promoted by it. Let no one despair of seeing such a classification till he has examined the one presented in the work before us, a synopsis of which commences on the four hundred and fourth page. This synopsis, which may be regarded as a syllabus or abstract of the whole science, is clearly the result of the most profound study and analysis. It is what some one has represented it to be "a common sense classification, without arbitrariness—true to nature, and faithful to science; and will commend itself to every intelligent physician." It was neither created, contrived, nor invented; it was discovered. Not the whole of it has been discovered; we shall yet obtain new views of it. Like most other things, it is susceptible of improvement; but its principles—its foundation will not be materially altered. It supplies an index and puts up the way-marks to guide and direct us in our future investigations.

Comprehended in this synopsis are his definitions of the several classes. Here also, we notice the same fidelity to truth and nature. Unlike those of most authors, they answer all the purposes of definitions. The importance of clear, precise, and true definitions need not be insisted on. Here, obviously, neither clearness, accuracy, nor precision are to be sacrificed to brevity. In these respects there is the widest contrast imaginable between him and other writers, insomuch that, while examining his, we were frequently led to inquire whether there were any others that could be properly called definitions. They evince either far more close and accurate observations of the powers and effects of medicines than are common, or a more happy faculty of portraying them. In either case, his are not to be ignored. We are tempted to give an illustration; but first a word or two by way of explanation will be needed. The nervines of some authors

and the antispasmodics of others, correspond to the euphrenics* of Dr. Tully, and include the same articles, viz: tea, coffee, valerian, tobacco, wine, alcohol, ether, exhilarating gas, chloroform, etc.; the list of articles, according to Dr. Tully, being a large and important one. His proem to this class will be found interesting, not to physicians only, but to non-professional readers, so many of whom are as familiar with the operations of some of them as physicians themselves. The following definitions of antispasmodics, as given by different authors, may be cited. They are taken from books that happen to lie upon our table.

1. "Antispasmodics, with a general stimulant power, exert a peculiar influence over the nervous system, exhibited in a relaxation of spasm, the calming of nervous irritation, etc., without any special and decided determination to the brain."

2. "Antispasmodics are medicines that subdue or alleviate spasm, independent of the removal of its cause."

3. "Antispasmodics are medicines that increase and equalize nervous energy."

We have not time to search for authors who use the term nervines instead of antispasmodics as the name of this class; but their definitions will not vary materially from the foregoing. We now turn to Dr. Tully's definition of the same class of articles, though under a different name, which is as follows:

"The Euphrenics, *in the first degree of their operation*, obviate languor or lassitude where it exists; *in the second degree of their operation*, produce a peculiar, calm, placid, and pleasant state or condition; *in the third degree of their operation*, occasion a peculiar and rather agreeable preternatural but not exhausting wakefulness; *in the fourth degree of their operation*, produce more or less positive exhilaration, which, by some articles, is increased to such a degree, that the actions of the subject are not under the control of his will, and perhaps amount to actual delirium; *in the fifth degree of their operation*, occasion a complete anæsthesia, or destitution of common sensation, or a state of insensibility to pain, sometimes with, and sometimes without, loss of consciousness."

Before leaving this subject of the definitions, which should be pursued much farther in order to exhibit all the important peculiarities of those contained in this synopsis, we should notice what may be regarded as a fault in the one already quoted. It will be observed that, in his definition at least, he does not even recognize an antispasmodic effect as belonging to this class of articles. This probably arose from no difference of opinion between him and others in regard to their operation, but simply to the facts in which all will agree, viz.: that these are by no means the most reliable remedies for spasms; that this effect from them is only an occasional or incidental one; and that the articles are far more valuable and far more frequently prescribed for

* The reader is desired to exercise all possible forbearance till we come to apologize, as best we can, for Dr. Tully's use of Greek words, which may render his treatise distasteful to many.

other purposes; while an antispasmodic effect is obtained with much greater certainty from articles belonging to another class. The antispasmodic effect being only an occasional or incidental one, this should not be alluded to in the definition; while such an effect being produced with far greater certainty by another set of articles, renders the name inappropriate and liable to mislead, according to Dr. Tully. Those who have prejudged this work may object, as they will doubtless, to the precision of thought, the close reasoning, the just criticisms, the useful comparisons, and the important practical distinctions, that characterize and pervade it; we cannot think that posterity will adjudge them useless or unimportant.

But in this synopsis there are other things to be noticed of still greater importance than any that have been yet referred to. Besides examining the different classes heretofore recognized, showing the insufficiency of the foundations of some and rejecting them, he introduces several that are entirely new. An analytical survey of the changes thus proposed, and the reasons for them, tracing them in their practical results, their effects to modify the whole science of Pharmacology and of practical medicine, would take us far beyond the limits assigned us. Indeed nothing short of a reprint of the synopsis itself, together with a considerable part of the proem to each of the new classes, would do justice to the subject. In regard to several of the new classes there can be no question of their being well founded and important to be retained. We shall have time to speak of only one of them.

There are a number of articles, some of which have been coming more into use of late, that have heretofore been classed with the narcotics, not because they have the slightest effect to allay pain, irritation, or restlessness, or to produce sleep or somnolency, but simply, as it would seem, because, like the narcotics, they act chiefly upon the nervous system. No true definition of the narcotics can be given that would touch a true definition of the operation of these articles at any other point than this—their action upon the nervous system. This difficulty has been discovered in part, and attempted to be remedied by calling these acrid narcotics, though the majority of them, and the most prominent ones, as strychnos and ignatia, have no acrid properties whatever, while aconite and arnica have. These articles, whether acrid or not, are brought together and arranged in a distinct class. The class being new, he must of course be allowed to have a new name for it. Narcotics, from which class this seems to have seceded, being Greek, and nervous erethism being the most expressive of their effects, he calls them erethistics. No good certainly can come from calling articles narcotics which produce none of the ordinary effects for which narcotics are given, but effects which are in some respects opposite to those of narcotics His definition of this class, compared with that of the narcotics, will exhibit the prominent peculiarities of each, while the proem to each will exhibit the difference in their therapeutic applications. If the definitions are as faithful as that of the euphrenics heretofore cited—as, from the attention we have given to

the subject since the proems were published, we think they are—it will be seen at once that, if the author makes some distinctions that will not be soon recognized by the profession, he makes others that are important to be recognized immediately.

In the class euphrenics, the definition of which has been quoted, will be found not only the nervines and antispasmodics of other authors, but several articles that have been heretofore classed with the narcotics. It is not till the power upon which a class is founded has been clearly recognized and defined, that we have anything to guide us in selecting the articles that belong to it ; and it is the thorough manner in which these primary steps have been taken—distinctly recognizing the power and clearly defining it, which are in reality but one and the same thing—that makes such havoc with all previous classifications. Another cause that has contributed to this, however, is his thorough investigations of the precise powers of each and every article, and which has resulted in the transferring of several of them from one class to another.

With regard to the adenagics, another new class to which no allusion has been made, a distinguished physician once remarked to us that "its introduction would form an era in the history of medicine." It matters not if some of the articles it includes have been in use time immemorial, or that the power upon which it is founded has been indistinctly recognized ; it is the right use of our knowledge—our making the most of it—that is to be commended. If the articles have come in, they have been intruders heretofore, for they could find no place in any of our systems. To what class can mercury, iodine, colchicum, veratrum, sanguinaria, and many others in daily use be referred at present? Indeed, so vague and indefinite have been our notions in regard to the power, and its therapeutic application, that it has been difficult, if not impossible, to communicate any knowledge we may have acquired in regard to either ; except that they are *good* for syphilis, scrofula, rheumatism, etc. These evils will be remedied, to a great extent, by a distinct recognition of the power, a clear definition of it, by bringing together all the articles that possess it, comparing them with each other, arranging them in a distinct class, and thus directing greater attention to it, pointing out the way and leading to its further investigation. As in pathology, so in therapeutics, there are many points upon which our present knowledge is of little or no avail, but which it would be easy, if we were not too strongly set against innovations, so to connect, systematize and arrange, as to make them available and even highly useful.

There are those who think little of materia medica, who do not pursue this as an important branch of medicine, who speak and write flippantly against a redundancy or a long catalogue of articles, and even against the use of much medicines. They will not be particularly interested in this subject. But to those who regard materia medica as of great practical importance, who are more dependent upon their knowledge of the precise operation and effects of the various articles they use, the best way of managing them, and their adaptation

to the relief of certain symptoms and certain pathological conditions, than to any other kind of knowledge, the opening of Tully's Materia Medica, and especially on arriving at this part of it, will be like a mine of wealth which will not be forsaken till it has been thoroughly explored; provided, however, that they have no preconceived notions against innovations, or in favor of the immutability of our present systems. We have only to say further, that whatever may be thought of his reasons for these innovations, as they may be termed, a thorough consideration of them cannot fail of being useful in exciting thought and a spirit of investigation, in producing more close observations, in gaining new experience and directing attention to some points never before presented to most minds, and perhaps never before presented anywhere; and, above all, in awakening a new interest and producing enlarged views of the whole science of medicine. Such, as appears to us, must be the inevitable effects upon those who will address themselves earnestly to the study of the subject as it is here presented, and this, too, whether the author's propositions shall be acceded to or rejected. It is the tendency of this work to do all this, whenever it is studied, that constitutes one of its chief merits. Good compilations are not to be undervalued, though good compilers are common; but such are not to be compared with the originality, independence and essential vitality of thought, insight and investigation, which are not common, the results of which are here displayed.

The reasons for most of these changes are sufficient. It may be predicted, with the utmost certainty, that their utility and importance will never be questioned; though, for the present, they may be simply ignored; while some of the minor faults of the work may be held prominently up to view. If independence of thought and judgment is not characteristic of physicians of the present age, it is to this that they are to look, even more than to the commutation of facts, for the attainment of their high object. It is to this that they are often indebted for the facts themselves, and still more frequently for a knowledge of their use and importance; while there is nothing that stands more in the way of the advancement of medicine than that kind of deference to public opinion, or the opinion of individuals, which sometimes amounts to servility, and which is too often apparent. It is humiliating to hear physicians say, as they have often said, and without blushing, "whether this thing is to be well received and become popular or not, depends upon its reception in certain quarters, by certain societies or certain individuals." In such cases, both the societies and the individuals referred to may be quite innocent; but the effects are the same, the fault being with the dependents themselves. There are many other ways in which this lack of independence manifests itself; but where there is one who will receive a proposition upon its merits, there may be twenty or even a hundred who will wait to know how it is to be received in certain quarters or by certain individuals. Even where independence is most looked for and most needed, it is often most wanting. The length of his subscription-list is of too much consequence to the journalist to admit of his expressing his real convic-

tions in favor of an unpopular doctrine, though, as we shall have occasion to show, he is, in some cases at least, prevented even from examining a proposition against which judgment has already been passed. Fortunately, or unfortunately, such journalists soon become fitted to their condition, for this habit of suppressing one's convictions soon relieves him of the misfortune of having any convictions; or at least any that need to be expressed. Vaccination itself is not a more sure prevention of variola. Whatever good may result from medical societies and associations—and that much good has resulted from them cannot be denied—of their ill effects in suppressing independence of thought and judgment there can be no doubt; and yet for this there may be no individual member of any of them who is responsible. The evil is greatest where the society is most flourishing and influential, when there are so many members who have reputations already achieved or to achieve—and it is to be regretted that there are so many that belong to one or the other of these classes—and with whom nothing can pass till it has been indorsed by the society. Deference to the society—certainly not to the individuals of it, may be characteristic of the leaders, if there are any, as well as of others; with each and with all, though the soul of the society, or the thing that is deferred to, has no existence, the phantom has its sway. It is in the mechanic arts, where thought and judgment are free, where no deference is paid to soulless societies, and where changes and innovations, instead of being resisted, are welcome and invited, or examined at least, that improvements are the most rapid. Whatever we may do or aim to do for the good of the profession, we should do nothing, willingly or unwillingly, to harm independence of thought and judgment, to its injury. Nor is there any department of medicine that has been so far perfected as to make it necessary that all important changes should be so strictly guarded against. The principles of medicine are not yet so numerous, nor are its doctrines so well established, that the injunction "prove all things and hold fast that which is good" is not as applicable to physicians as to theologians. Physicians, as well as theologians, may be too apt to be frightened at heresy, or what they deem such; and when they scent heresy afar, or when, upon its nearer approach, they fly in its face with tooth and nail, accuse it wrongfully, abuse and misrepresent it in various ways, we are always reminded of Uncle Toby's answer to the question, "What's the reason that treason never prospers?" "Because," said he, "when it prospers, it isn't called treason;" and that there will be time enough for treason and loyalty in politics, as well as heresy and orthodoxy in physic and theology, to change names many times yet.

We are loth to leave this subject of classification, upon which so much remains to be said, and which has been pursued only far enough to show the manner in which this part of the work has been performed, but must proceed to notice some of the objections that have been brought against it. One of the faults of the work, which has been most frequently alluded to, and which may have more effect to prevent its being well received than any other, is his introduction of new terms,

and particularly his resorting to the Greek language for them. For this it may be hard to find an apology, but lest its valuable merits should be linked with it, and all be rejected together, it seems important that some apology should be offered.

A definitive nomenclature can have no effect but to retard the progress of science. Names too often become things, and error is propagated by inappropriate names much oftener than is supposed. We well recollect how, in our early practice, antispasmodics* were resorted to in all cases of spasms, to the neglect of what we now know to be the most effectual remedies for spasms; and this is by no means the only instance in which we are still liable to be misled by inappropriate names. Authors themselves are misled in the same way. Having first adopted an inappropriate name for their class, their definitions must be so formed as to make them seem appropriate; whereas, the true course to be pursued in such a case, is first to consult truth and nature—the prominent and characteristic efforts of the articles belonging to the class—in framing the definition, and then selecting a name that would be appropriate. Commencing at the wrong end, their minds were diverted from truth and nature, which have very little to do with their definitions, and hence both the name and their definitions are worse than useless. It can hardly be supposed that the authors, from whom the above definitions of antispasmodics were taken, were blind to this fault, and yet upon any other supposition, their neglecting to correct it, lest they should be accused of innovation, would be unpardonable. As there is no science to which husbands and wives, parents and children, brothers and sisters, and even physicians themselves, so often look, and with the intensest anxiety for its benefits, as to materia medica, so there is none in which reformation in this respect is so loudly called for.

An error of this kind, the effects of which were more amusing than serious, was committed by the author himself, notwithstanding all the pains he takes to guard against such. In treating of the *modus operandi medicaminum*, he had an article headed "non-absorption of medicines into the system," which was inappropriate. Two of the journalists, misled by it, attacked him vigorously, and to the extent of several columns in their journals, referring to facts and quoting authorities to prove that medicines are absorbed, while there were others who simply lamented the author's lack of information on the subject; whereas, had they read the article, instead of being frightened at its heading, they would have seen that the absorption of medicines was not denied; that he simply maintained that their absorption was not necessary to their medicinal effects; or that this was not the way to explain the modus operandi of medicines; and that the only work he had laid out for them, was to refute his reasoning upon this point. We regretted the mistake on our own account, for, strongly suspecting

* We beg pardon of the author for using this term instead of antispastics. There is this to be said, however, in favor of his term: it saves type; though this, most certainly cannot be his reason for adopting it.

the author to be in error, we were anxious that some of the constituted watchmen should set him right; instead of which they only did battle against the man of straw which he had inadvertently set up for them. We are glad to see that the author, true to his instincts and deploring such consequences, has done what he could to correct the mistake, by inserting in his table of contents "absorption of medicines not necessary to their medicinal effects," instead of the original heading, which is retained, of course, in the body of the work. We trust that some one will ere long address himself to the work of exposing his sophistry or the insufficiency of his reasoning on this subject.

It seems hardly necessary to insist on the use of appropriate names, or the importance of substituting appropriate for inappropriate ones in all cases, regardless of the cry of innovation that may be raised. those who lament most the author's course in this respect are generally the greatest sticklers for authority, and will be glad to learn doubtless that he is supported in it by the very highest authority. The improvement of science itself must go hand in hand with the improvement of its nomenclature. To this effect he quotes two authorities, as follows. We wish these quotations to be inserted here, because it would be difficult to find three brief paragraphs that have resulted from so much close and sound thinking. They are not argumentative, but are important, simply for the truths that they enunciate, and which lie nearer the foundation of all science than is generally supposed.

"We think only through the medium of words." "Algebra, which is adapted to its purpose in every species of expression, in the most simple, most exact and best manner possible, is at the same time a language and an analytical method." "The art of reasoning is nothing more than a language well arranged."

"While I thought myself only employed in forming a nomenclature, and while I proposed to myself nothing more than to improve the language of chemistry, my work transformed itself by degrees, without my being able to prevent it, into a treatise upon the elements of chemistry."

"The impossibility of separating the nomenclature of a science from the science itself, is owing to this, that every branch of physical science must consist of three things—the series of facts which are the objects of the science—the ideas which represent the facts—and the words by which those ideas are expressed." "Like three impressions of the same seal, the word ought to produce the idea, and the idea to be a picture of the fact." "And as ideas are preserved and communicated by means of words, it follows of necessity that we cannot improve the language of any science, without at the same time improving the science itself; neither can we, on the other hand, improve a science without improving the language or nomenclature which belongs to it." "However certain the facts of any science may be, and however just the ideas we may have formed of these facts, we can only communicate false or imperfect impressions of these ideas to others, while we want

words by which they may be properly expressed."—(For references see *Tully's M. M.*, p. 231.)

It will hardly be pretended, by any one, that the language and nomenclature of materia medica are perfect, or that the science itself may not be greatly improved. In the task Dr. Tully has undertaken, therefore—a task to which there are but few more competent—he will have the prayers of all true lovers of science and the profession for his success, and can have no opposers for whom he will need to turn aside to the right hand or to the left, except such as may object to his manner of performing it. A close examination of it with reference to the subject, can hardly fail of convincing any one of the consistency and fitness, if not the agreeableness of its terminology.

In reference to its Greek words, of which so much complaint has been made, it will be observed, that in his nosology, he follows Dr. Good implicitly, against whom no such squeamishness was ever manifested; so that so far as nosology is concerned, Dr. Good must be put in the same category with him, and both must sink or swim together, except that Dr. Good must have about one hundred times the burden of Dr. Tully to bear, since this is about the proportion the offensive words of the former bear to those of the latter. But if both are pardoned in respect to nosology, the remaining offence of Dr. Tully will be his use of Greek for the names of the twenty or more classes of the materia medica, for which the reasons brought by Dr. Good in favor of Greek for his nosology, will be as valid for Dr. Tully; and it may be further said in extenuation of this fault, that he found one half of the names of the classes Greek at the commencement of his innovations.

We really find it difficult to treat this objection with seriousness, and can hardly believe, notwithstanding it has been so frequently urged in private of late, that it will ever be publicly and seriously proposed. It would seem that those who admire symmetry or due proportions and regular distribution of parts in architecture, should not be greatly displeased at such uniformity in the names of the classes as is here proposed, the best way of arriving at which, as appeared to him, was to go back to the Greek language, where all scientific men go in such emergencies. Uniformity, however, was by no means the greatest advantage contemplated in the few changes he suggests.

We can readily understand how an unprejudiced reader, may, from a hasty or partial examination of it, made without particular reference to its terminology, and without considering the reasons for any change in this respect, be displeased at some of its new terms; though we cannot so easily comprehend how this special antipathy to its Greek words, which is so apparent of late, has originated. It was hardly to be expected that in the report on American medical literature, recently submitted to the American Medical Association, its Greek words would be alluded to in a disparaging manner; or in such a manner as to make this the grand objection urged by all objectors since; not one in fifty of whom can possibly have had an opportunity of examining it for themselves, and especially with reference to its Greek words. Those who have examined the synopsis of the classification where their etymology

and exact signification are given, can find no difficulty in understanding them, and there are not over half a dozen of them that would not be well enough understood without any explanation. These last, however, occur in the introduction, and before he arrives at the classification. Here some of them may not have been sufficiently explained; and here only can there be any just ground for complaint of this kind.

Those who admit that some improvement in the language and nomenclature of materia medica may be called for, may wish to know something of the author's qualifications for such an undertaking. There are but few, however, who will need to be told, that he is a physician of no ordinary scientific attainments, and a philologist to whom Webster himself did honor more than to any living man in America, and that he who comes to criticise him in these respects, should come well prepared. Those who are eloquent in favor of a more thorough preparatory education for the medical student, as the first step to the development of a more high-toned medical literature in our country, may ignore Tully's Materia Medica, or may speak disparagingly of its Greek words, but they will do either with an exceedingly ill grace.

Though the example he sets in using chemical and natural history names, instead of the common, popular, or vulgar ones, may never be followed, yet if this is absolutely necessary to anything like a good degree of accuracy, as he, apparently at least, proves it to be, those who may object to his course in this respect, will have nothing to do but to show either the fallacy of his reasoning upon the subject, or that such accuracy and precision as he contends for are not needed. From the utter confusion in which this whole subject of names for the articles of materia medica, whether of chemical, vegetable, or animal origin, remains at present, and which is constantly increasing, it is not to be wondered at, that some attempt at reformation should be made in this respect. The errors in it should be pointed out, but the attempt itself is certainly pardonable. For many of the articles, we have none but their chemical and natural history names at present, and for the sake of uniformity as well as accuracy, it may be deemed expedient to take the course that he suggests; and besides, the full synonymy he proposes to give, in treating of the individual articles, will obviate all objections on this account; except the tendency it must have to increase the size of the second volume. If the evil is not checked soon, the synonymy themselves will be sufficient to fill a large sized volume.

Its accuracy and precision in the use of language is a commendable feature of the work; in noticing which, we shall be obliged to allude to some of its real faults. If its tautology, its verbiage, or its useless repetition of words and phrases, and its disagreeable prolixity in other respects, may be justly complained of, there is this to be said in its favor, that no one, who reads it with any care at least, is liable to mistake his meaning, or the precise thought that he wishes to convey. In this respect there are but few medical works to be compared with it. A recent English writer upon medicine says, and with too much just-

ness we fear, "If this science abounds in bad observation, in imaginary experience, and even positive *mala fides*, so have the laws of philosophy and logic scarcely yet found their way into it." "The language of truth is simple and brief, but that is not the language of physic." "Its words have meanings, and the same words have always the same meaning, but this is not the language of physic. The language of error is multitudinous, variable, vague, and unsteady, and this is the language of physic." "If there be a philosophical reader who doubts this, if there be a logician, a man accustomed to evidence, who has not read medical books, let him read, even the most celebrated, and be satisfied."

Should we not look with favor upon him who makes a successful attempt to redeem physic from this reproach, and pardon the minor faults he may have committed in his anxiety to do so; and which may have led him to an opposite extreme? The very best words to express his thought and meaning are invariably selected. To be always sure of making himself fully and clearly understood, he uses what may be considered a redundancy of words, but the proportion of his readers who would be liable to mistake his meaning without them, may not be as small as some will suppose. In our own judgment, however, the faults for which we are apologizing are real. But neither conciseness nor brevity, nor even elegance of style, are the most essential characteristics of a treatise upon a subject like this, and he who is enamored of these only, though in many instances his taste in these respects may be fully gratified, will not waste his time in perusing Tully's Materia Medica.

The principles of practice laid down by the author, and his means of applying them, we have not time to consider. Unless this, the most important subject connected with it, should be taken up by some one else, we may return to it hereafter. Here there will be more room for difference of opinion, and more just grounds for disagreeing with the author than we have found heretofore; though from our observations, since our attention was first turned to the work, we have reason to suspect that logic and learning, and even independence, are not such disqualifications for just that kind of research, observation and experience, that enables a physician to adopt his remedies to the treatment of disease in the most rational and best manner, as they are sometimes represented to be. There is as much novelty and originality displayed here, as in its scientific arrangement. On some points in physiology, pathology, as well as therapeutics, his opinions are very nearly opposite to those commonly received, and it would be strange if, among all the new views it presents, there should be none that will ever be regarded as improvements upon those entertained at present.

J. C.

ART. X.—*De l'exfoliation physiologique et pathologique de la membrane interne de l'uterus.* Par A. RACIBORSKI. Paris: J. B. Baillière et fils, 1857, pp. 80.

RACIBORSKI, the author of several ovological works, has increased his already well-established reputation by a new contribution to medical literature. The work before us treats of some of the most interesting portions of gynæcological science.

The exfoliation of the mucous membrane of the uterus may be considered from a physiological and pathological point of view. The existence of a mucous membrane has long been doubted by some of the most prominent men, such as Chaussier, Ribes, Béclard, Breschet, Morgagni, and Boërhaave; and even for Bischoff it was a difficult task to prove its existence. Some authors considered it to be a serous membrane, owing to the fact that sometimes a serous fluid was found in the cavity of the uterus. Its firm adherence to the deeper layers prevented for a long time a clear knowledge of its true nature. Still by treating a section of the womb with chromic acid, it is easy to recognize three different layers, viz., the mucous membrane, the vascular and the muscular strata. The structure of the uterine mucous membrane is peculiar, as it consists partially of fibrous corpuscula (tissue fibro-plastique), partially of common cellular tissue, with admixture of amorphous tissue, in which the capillaries and, the glands are imbedded. The mucous membrane is covered with vibratile epithelia, which spreads to the middle of the neck. The glands of the neck are larger than those of the body; they are called *glandulæ nabothi;* and if their orifice is closed and their body enlarged by mucus, they are called *ovula nabothi.* Its most striking difference from other mucous membranes is the presence of fibrous corpuscula (tissue fibro-plastique), which are, for the most part, only met with in neoplastic or regenerated structures. Oken was the first author who pronounced that the membrana decidua was nothing but the hypertrophied mucous membrane of the womb. In the very first stages of pregnancy, the mucous membrane or decidua shows a considerable enlargement of the nuclei, of the cellular, and elastic fibres, while the amorphous membrane obtains a granulated appearance. In this thickened membrane the ovulum is often so much hidden during the first days that it is at times very difficult to detect it, even with the aid of a magnifying glass. In other cases the ovulum is only superficially attached to the membrane, and adheres to it by very thin filaments, which sometimes break and let the ovulum fall down, so as to lay upon the internal orifice—a fact which has been proven by evidence (see third observation). Therefore the cavity of the decidua is occasionally found seemingly empty, giving rise to doubt whether conception was present or not. That portion of the mucous membrane which surrounds the ovulum (membrana decidua reflexa), is driven forward while the former is growing larger, but atrophies, at a later period, or only remains at its basis. About the third month, the membrana decidua reflexa also begins to atrophy, and the chief vascular activity is concentrated around that portion of the mucous membrane where the

ovulum is attached (membrana decidua serotina). Meanwhile the membrana decidua vera loses its firm coherence with the womb, and serves as an envelope of the ovum *i. e.*, the mucous membrane is exfoliated; and behind this the uterus begins to form a new mucous membrane. The remarkable fact, that the mucous membrane of the cervix does not participate in these alterations finds no explanation by Dr. Richards' researches, who states that it is only the epithelial layer which forms one continuous coat from the body to the neck, while the deeper layers constituting the mucous membrane proper, are interrupted by a horizontal sulcus near the orificium internum.

The regeneration of the mucous membrane may be properly compared with the cicatrization of a wound, normal membrane being formed instead of cicatrized tissue—a proceeding which is observed not unfrequently on other portions of the system.

Raciborski holds that the membrana caduca of mammalia is a mucous secretion, contrary to the opinion of most embryologists. In all normal cases the posterior surface of the placenta is covered with the membrana decidua serotina. [This is not exactly so, as it is only the hypertrophied epithelium which covers the detached placenta.—E. N.] But it happens at times that this section of the former uterine mucous membrane is not exfoliated, and those are the most obstinate cases of adhering placenta.

The second division of this work treats of the *pathological exfoliation* with *new considerations on abortion at the beginning of pregnancy.* This is, no doubt, the most interesting and most original part of the work, as the physiological portion presents not much more than a recapitulation of the now generally accepted views on the subject. It was Dr. Simpson who first of all, in 1847, pointed out the possibility of a pathological exfoliation, in declaring the membrane (like pieces lost during a dysmenorrhœa membranacea) to be nothing but hypertrophied uterine mucous membrane, which fact was afterwards confirmed with the microscope by Lebert, Frericks, Bischoff, Follin, etc.

Up to the present time, only a few observations have been published regarding this subject, while its cause, influence, and consequence upon the organism have not been taken into consideration. The author begins with a review of the published undoubted cases of pathological exfoliation. The first observation is from Morgagni, and though this great physician was unacquainted with the real nature and right explanation of the fact, the description of the case is so true and exact, that every reader is impressed with its real meaning. Up to the present time the pathological exfoliation has been considered as the consequence of an inflammation or an exudation of the mucous membrane. Raciborski admits only one cause, viz., a fertile coitus where the fructified ovulum has been destroyed at the beginning by some pathological process, the membrana decidua being expelled as a heterogeneous body at a later period. Therefore, it is not right to attribute the dysmenorrhœa membranacea to an exfoliation of the mucous membrane. These cases are nothing but an expulsion of coagulated and discolored blood from the womb. In all the authentic cases, as published in our litera-

ture, the women in question had had sexual intercourse, and in some the virginity could not be proven. In all cases where the catamenial periods have been mentioned, it could be stated, that between the last term and the time of exfoliation, a longer period than four weeks had intervened, viz., forty days to two months, while previous to this accident, the women had always menstruated quite regularly. Moreover, the expelled membranes looked just like the membrana caduca of the first days of conception, in which very often the ovulum cannot be discovered, owing to its being imbedded in the thickened membrane.

[In these latter considerations the author no doubt goes too far. If a woman has an exfoliation of the uterine mucous membrane five weeks after her last term, why should she not have it quite as well just at her next period? Even the exfoliation, after a fertile intercourse, is nothing but the consequence of a powerful and lasting congestion of the mucous membrane. Why should not menstrual congestion alone be sufficiently strong in some women to cause hypertrophy and separation of the mucous membrane of the womb—an occurrence occasionally observed in other portions of the system? Moreover, the author has no more right to doubt the virginity in the cases alluded to, than every other man has to believe in it. Withal, we are far from considering every instance of dysmenorrhœa membranacea to be an exfoliation of the mucous membrane. I remember having examined with the microscope membranous particles, which were expelled at every catamenial period from a woman laboring under anteflexio uteri, when they were found to consist of nothing but coagulated fibrine. Therefore, the writer concludes that the membranes discharged in dysmenorrhœa membranacea are of different catamenial character in different instances. E. N.]

But it sometimes happens, after the decay of the ovum, that the membrana caduca is not disengaged from the surface of the womb in its full extent, but adhering on some points, it is turned inside out, like an inverted uterus, thus protruding from the mouth of the womb in the shape of a pear, and having all the appearance of a polypus. In other instances, where the membrane remains partially in connection with the womb, it is often expelled after a considerable length of time, thus occasioning the most obstinate menorrhagia, and the blood coagulating around it in different layers, it has been mistaken for a polypus inside the womb. Besides simple sanguineous concretions, it is the ovum itself, with its manifold alterations, that has to be taken into consideration in making a diagnosis of exfoliation. If it is the ovum, there is always a cavity inside the tumor, filled with a liquid, and very often with traces of the fœtus, which never is met with in mere exfoliation. For making a differential diagnosis of an exfoliation from an abortion or old blood coagula inside the womb, it is necessary to use the uterine probe, which in the former case enters very freely and finds the cavity pretty free and easily explorable, while in the latter instances only a very limited space for its movements is left. (Ne quid nimis!) The therapeutical means to be applied in a beginning or partially effected exfoliation are powerful injections of cold water into the womb,

in order to produce a perfect separation of the membrane, and Recamier's curette, by which it has to be removed. The author reports one case where he was able to make a diagnosis of imperfect exfoliation, and to apply the named remedies with full success.

After perusing this short synopsis of Raciborski's work, every physiologist and obstetrician will be impressed with the necessity of making a personal acquaintance with the original work itself. It is one of the most interesting articles in our literature. E. NOEGGERATH.

BIBLIOGRAPHICAL NOTICES.

ART. XI.—*Pathology and Treatment of the Paralysis of Muscular Motion.* By J. P. BATCHELDER, M.D. New York, 8vo. pp. 62.

RARELY have we perused pages of greater practical interest than these by the venerable President of the Academy of Medicine, and very happily does this little *brochure* display some of the rich fruits of its excellent author's life-long habit of philosophical observation and the study of nature's laws in health and in disease.

After stating his views relating to the pathological and physiological conditions concerned in motor paralysis, and the means of recovery, Dr. Batchelder details ten cases that came under his direction in the New York Hospital, by the politeness of the medical gentlemen connected with that establishment—preferring to publish the record of cases treated in a public institution rather than those occurring in private practice, for the obvious reason, that such cases were observed by many physicians during the progress of cure, inviting the severest scrutiny.

We regret that we have only space for the following brief quotations from this pamphlet :

"We do not consider the paralysis of which we are about to treat, a disease, but the symptom of one which mainly affects the voluntary muscles, or the muscles of animal life. The non-communication of the appropriate stimulus to these muscles by the mind, constitutes the disease of which paralysis is the symptom. The muscles having ceased to act, form the habit of inactivity ; and the mind, acquiescing from necessity or otherwise, contracts the habit of not communicating the necessary and appropriate stimulus to them through the nerves ; so that by the conjunction of these causes, additional morbid conditions of a secondary and somewhat chronic nature, have been induced, of which paralysis is also in this connection a symptom. As the removal of these cures the patient, we shall endeavor to ascertain and settle their pathology, from which we hope to be able to deduce the proper method of treatment. The performance of function induces a derivation of blood to an organ, which in a measure ceases when the function ceases; and the organ diminishes in size as the natural and almost inevitable consequence. This is a general law of the system, to which the muscles of animal life, like all other organs, are subject ; hence they become atrophied in paralysis, or when kept a considerable time at rest from other

causes. Thus deprived of blood, their capillary vessels shrink, and what the capillaries of a part do, that will the part as a whole do. The atrophied muscles become shortened, and refuse to be elongated except by force; neither of which would have happened but for this shrinking of the capillaries." * * *

"This state of things may continue after the primary cause of the paralysis has been removed or ceased to operate; but the patient having been quiescent for a time, becomes acquiescent from habit, and will not make the slightest effort to move his limbs—indeed insists that he cannot do it—that it is impossible. He has, as it were, forgotten how to produce the antecedent cerebral change as an act of the will; and the only way to enable him to recover the power or learn the art of doing it, is to cause the members to perform the motions calculated to produce the changes in the brain. The motions first and the changes in the cerebrum next, are the order and method of nature. By this expedient, duly performed and persevered in, he will at length be enabled to reënact the cerebral change, and the movement of the limbs will follow in exact proportion to the energy with which this change in the brain is effected. Both, for obvious reasons, will be feeble at first; but he must be encouraged and helped; when by repetition, the efforts will be more and more vigorous, and the results more and more apparent and satisfactory." * * * *

"The paralytic, then, so far as the paralysis is concerned, is in much the same condition as the infant at birth; and in order to recover the use of his limbs, must go through a course of training somewhat analogous to that to which he was subjected when he first learned their use —his muscles must be reëducated." * * *

"In a paralysis of some duration, the muscles of the palsied limbs are not all in the same predicament. Some are powerless; some are too strongly contracted; others, neither contracted nor powerless, are, nevertheless, quite ready to act, not in obedience to the will, but in opposition to those which can and do act somewhat in accordance with its dictates; but all the muscles, generally speaking, concur in disregarding the volitions of the patient.

"From these different conditions of the muscles, the indications of cure may be deduced with strict logical and pathological propriety. They are :

"1. To restore strength to the powerless muscles.

"2. To overcome abnormal contraction in others.

"3. To obviate or counteract the perverse action of such as act irregularly.

"4. To renovate the will, and reconnect it with the affected muscles.

The first three indications point directly to the fourth, which is, in fact, the ultimate object aimed at."

TREATMENT.

"*First Indication.*—To restore strength to the powerless muscles.

"*Second Indication.*—To overcome the inordinate contraction in others.

"As these indications are, to some extent, answered by the same means, we propose to consider them in connection, so far, at least, as the sameness of treatment goes.

"The muscles, in paralysis of the arm from lead, furnish a tolerably good example of both these conditions. The extensors are powerless —the flexors, over contracted.

"In restoring tone to the powerless muscles, we resort, with great prospect of success, to an agent inherent in the muscles themselves, denominated 'passive contraction' by modern physiologists. This power causes a muscle to contract and shorten whenever its origin and insertion have become approximated. Muscles thus circumstanced, after a while resist with great energy all endeavors to elongate them, as every surgeon well knows who has had much to do with dislocations of long standing. In such and analogous cases, each entire muscle accommodates itself to the altered condition which obtains between its origin and insertion. To enable paralyzed muscles to recover their power we avail ourselves of the knowledge of these results, and cause their origin and insertion to approach each other, and keep them in this position for a longer or shorter time, as the case may be, or until the muscular fasciculi have begun to contract and adapt themselves to the change."

Dr. Batchelder closes his pamphlet with a page of very valuable suggestions relative to the means of preserving a vigorous condition of both body and mind, in the decline of life. Long may this noble lover of his profession remain a living example of the truth and practical value of the principles and practice recommended by him.

ART. XII.—*Clinical Lectures on the Principles and Practice of Medicine.* By JOHN HUGHES BENNETT, M.D., F.R.S.E., etc. Edinburgh. Samuel S. & William Wood, New York, 1858. 8vo.

THIS is the second and enlarged edition of one of the most valuable books which have lately emanated from the medical press. It contains over nine hundred pages, full of important, and in many instances, novel ideas, on subjects which will command the attention of every practitioner in medicine. Eulogistic notices are not required to procure for it a favorable reception. No publications on practical medicine are so well received as clinical lectures, and few possess better qualifications for rendering such lectures interesting and useful than Prof. Bennett. The discoverer of the "white cell blood" has inspected the different organs in disease with the same thoroughness which characterized his examination of the circulating fluid, and by the aid of the microscope has assisted in settling many obscure points in pathology. No one devoted to the profession will fail to peruse these lectures, and acquaint himself with the discoveries of so ardent an explorer in the field of medicine.

The first section of the book relates to the "Examination of the Patient," explaining fully the subject of physical exploration, the microscope, its uses, the microscopic appearances of the blood, and the

different excretions; in the second section the various exudations degenerations and concretions are fully discussed; the third section relates to the recent changes in therapeutics, and the remainder of the work, containing over six hundred pages, is devoted to the consideration of individual diseases. The book contains complete histories of over two hundred cases, in a large proportion of which post-mortem and microscopic examinations were made, and its value is greatly enhanced by the large number of woodcuts, over four hundred, representing for the most part microscopic appearances.

ART. XIII.—*The Physiological Anatomy and Physiology of Man.* By ROBERT BENTLEY TODD, M.D., F.R.S., and WILLIAM BOWMAN, F.R.S., late Professors of Physiology, and General and Morbid Anatomy in King's College, London. Complete in one volume, with two hundred and ninety-eight illustrations. Philadelphia: Blanchard & Lea, 1857, 8vo., pp. 926.

THE title of this work has long been familiar to the profession, as nearly fifteen years have elapsed since the authors began their publication. But during that long period, no branch of medical science has made such rapid advancements as physiology. The question may well be asked, how can a work of physiology written fifteen years since, be of any value to the student of to-day? Indeed, it may justly be said, that within that time true scientific physiology has been established. The theories of that day, so crude and little plausible as scarcely to obtain credence among their own projectors, have yielded to positive facts and well established systems. But this is not all; during that period the bounds of physiological science have been immensely extended. Not only have the fields of investigation, then so imperfectly wrought, been thoroughly cultivated, but old landmarks have been removed, and a boundless expanse has been admitted to the domain of physiological science.

On examining the work before us, we find that its learned authors have not been unmindful of the disadvantage at which they labored. This they have striven to overcome by greater care in the study of each individual subject, and more thorough personal investigation. What appears, therefore, at first to be a necessary defect in the work, proves to be an actual advantage. The names of Todd and Bowman have long been familiar to the student of physiology. In this work we have the ripe experience of these laborious physiologists on every branch of this science. They gave each subject the most thorough and critical examination before making it a matter of record. Thus, while they advanced tardily, apparently in their publication, the work thus issued was a complete exponent of the science of physiology at the time of its final appearance.

We can, therefore, recommend this work as one of the most reliable which the student or practitioner can consult relating to physiology.

PART THIRD.

MEDICAL RETROSPECT.

Report on the Progress of Obstetrics and Diseases of Women; prepared for the NEW YORK JOURNAL OF MEDICINE. By E. NOEGGERATH, M.D., Physician to the Female Department of the German (Canal street) Dispensary, New York.

I.—ANATOMY AND PHYSIOLOGY.

1. *Etudes anatomiques et anatomo-pathologiques sur la statique de l'utérus.* Par Dr. F. A. ARAN. (Archiv. Génér., Feb. and March, 1858.) Under the name statique of the uterus, Dr. Aran comprises its situation as far as it is established by its anatomical condition, and as far as it is liable to be changed by different circumstances. Thinking that even now the discussion in regard to this subject had by no means come to a satisfactory result, the author intends to review the opinions current, and to add new observations and opinions of his own. Of the different ligaments believed to sustain the uterus in its position (two lateral, one anterior, one posterior—plicæ Douglasii), he thinks the latter alone deserve the title of ligament, because of their fibrous texture. His inquiries in regard to these structures differ somewhat from the description given of them by the most reliable anatomists: 1. It is not the inferior portion of the uterine neck from which they start, but from the point where the collum and corpus uteri meet. 2. Instead of two ligaments there exists in reality but one, because the inner and posterior fibres form but one continued layer, without any line of demarcation, while the middle strata cross each other in the median line, and the external bundles are mixed up on each side with the uterine tissue itself. 3. These ligaments do not always surround the cavum recto-vaginale, *i. e.*, they do not comprise in every instance the rectum in their posterior department. 4. They do not stop in the middle portion of the pelvis, but extend their ramifications as high as the fourth, and sometimes the fifth, lumbar vertebra. Moreover, the direction of the posterior ligament is not from below upwards, but it runs in the opposite direction; nor does it extend in one straight line from the uterus to the sacrum, but near the latter point it spreads outwards. Therefore its influence upon the position of the uterus is to prevent descent towards the outlet of the pelvis, retaining it over the neck near the os sacrum. These ligaments almost disappear during pregnancy, while they exhibit an enormous state of hypertrophy when the uterus is retroverted. The ligamenta rotunda are not intended to keep the uterus in its elevated position, but merely prevent the fundus from falling backwards; therefore the operation of shortening the round

ligaments, as proposed by Dr. Alquié for curing prolapsus uteri, would prove a failure. Notwithstanding Dr. Stoltz's experiment, who removed the entire vagina without producing an alteration in the position of the womb, it seems probable that the vagina has some influence in retaining the uterus in its position, as is proven by the good result following artificial constriction of the vagina for the purpose of curing the falling of the womb. Dr. Aran, far from underrating the importance of the vesico-uterine ligament as a means of influencing the position of the uterus, cannot agree entirely with Prof. Virchow's views, who seems to consider the adherence of the uterus with the bladder to be one of the chief points of its support. The conclusions drawn from these remarks are as follows: 1st. The uterus is suspended in the pelvic cavity of the adult female by a *complet* of different means of suspension, composed of the insertions of the bladder and vagina in front, of the vagina and the posterior ligaments in the rear, and laterally of the vagina and the lateral fibres of the posterior ligament. 2d. The combination of these means of suspension establishes a real axis—"*axe de suspension*"—around which the movements of the uterus are completed. The relation of the uterus to this "axe de suspension," is not yet fully ascertained. In following the natural development of the uterus from the very first months of existence, it is an acknowledged fact, that in fœtal life the body of the womb is always somewhat bent upon its neck, which flexion disappears the more the female advances in years, and above all it is the pregnant state which corrects this flexion of the uterine body. Dr. Gosselin found, in forty-eight post-mortem examinations of women who had never been pregnant, twenty-seven more or less decided anteflexions of the womb, eighteen perfectly straight, and three dubious cases. Dr. Aran found, among nine young virgin females, from 17 to 27 years of age, six decided anteflexions, two retroversions, and one straight uterus; of ten married sterile women, there were six below 24 years of age with decided anteflexions, two with anteversions (one of them 48, one 49 years old), two with an almost straight uterus (18 and 55 years old); of twenty-one women who had borne children, seven exhibited unmistakable anteflexion (23 to 27 years old), three presented a slight inclination in front (33, 40, and 57 years old), two showed retroversion (age, 28 to 40 years), in four the axis of the uterus followed that of the upper pelvis (ages, 26, 28, 33, and 44), in five cases the womb was retroverted (age, 22, 25, 40, 44, 45). In all of these cases no traces of uterine disease had been exhibited during life. This shows that 50 per cent. of the examined (post-mortem) women had an anteflexed womb, the cases belonging almost exclusively to young women and those who had never borne children. Therefore, in childhood and puberty the axis of the womb does not follow the axis of the upper pelvis, but is more or less inclined in front, which disappears the more the woman advances in years, and after she has been pregnant. In regard to Dr. Cruveilhier's opinion, that the axis of the uterus in the living female changes with the position of the body, Dr. Aran thinks that this state of indifferent axis is not the rule, but the exception, it being only met with in those cases where the means of suspension

around the uterus are in a state of weakness, such as occurs in consequence of repeated confinements. One thing is certain, that the uterus of *healthy females* may be found, in anteflexion or forward inclinations, quite straight, and in the direction of the upper pelvis, or in an indifferent position, following simply the laws of gravitation. The fœtal anteflexion of the uterus, Dr. Aran considers to be the result of the pressure of the abdominal viscera upon the extremely soft and flexible body of this organ. In more advanced age, the walls of the body of the uterus thickening, and the point of union between body and neck settling lower down, the condition favoring a state of anteflexion disappears. In those cases where anteflexion remains after the years of puberty, and, what is very rare, after pregnancy, the shortening of the round ligaments may be accounted for, in consequence of which the uterus is unable to be sufficiently thrown backwards by the bladder when filled with urine. There are two kinds of uterine obliquity; in the first instance the neck remains in its position, while the body is bent upon it towards the right or left side; in the second instance, one of the superior corners of the uterus is drawn upwards and in front, the other side of the womb being placed in the opposite direction; so in both cases the corresponding round ligament, and generally the utero-sacral ligament, are shortened. The greatest difference between the two round ligaments, as observed by Dr. Aran, was 95 mm.; the greatest number of these lateral inclinations is found among children, which condition seems to disappear as they advance in years. From these researches it appears that it is wrong to consider and treat anterior and lateral inflexions in young females, as pathological conditions, especially if they do not give rise to dysmenorrhœa or sterility in more advanced years.

2. *Dr. O. Speigelberg of Gottingen on the nervous centres and the motion of the uterus* (*Henle and Pfeuffer, Ztschr.* 2, 1858).—An analysis of a great number of experiments upon forty living animals in order to answer the question, What are the causes and the seat of uterine movements? led the author to the following conclusions: 1. The stoppage of the circulation, and consequent stasis of blood, is the cause of the peristaltic movements of the uterus. As long as the heart is in activity, there are no movements seen at all, or they are very trifling. 2. Through the nervi vagi no excitations are conducted to the uterus. 3. By irritation of the medulla oblongata, uterine movements can be effected. 4. The cerebellum is the nervous centre which chiefly controls the movements. 5. From every point of the spinal cord, but more especially from its lumbar and sacral portions, movements of the uterus can be produced. 6. The excitations starting from the central organs travel downwards along the medulla oblongata and the spinal cord, and proceed through the rami communicantes of the sympathetic, and through the sacral nerves to the uterus; and likewise excitations rising from the uterus are produced through the same channel. As to the order in which the uterine contractions follow, Dr. S. believes from his experiments, that first of all the mesometrium begins to contract, in consequence of which the uterus is fixed towards the pelvis; after

this the vagina and the cervix uteri contract; this circular contraction proceeds up to the fundus uteri, and from thence returning, presses the fœtus downwards, while the cervix and vagina are enlarged.

3. *Dr. Luschka on the liquid portion of the Graafian follicle* (*Wurtemb. Natur. Jahresh.* Jahrg. 13).—The walls of the follicle consist, first, of a membrane abundantly imbued with blood-vessels, the stroma of which is a cellular tissue with elastic fibres, and which is separated from the inner epithelium by an amorphous membrane, being attached externally to the stroma of the ovarium by a thin cellular tissue: secondly, of the epithelium—this consists of a great quantity of round or angular cells in the different stages of development; they represent what is called the *stratum granulosum*. These cells are most numerous on that portion of the sac where the ovulum is situated, which they surround on all sides, so that here a protrusion is formed into the cavity of the follicle, generally called cumulus proligerus.

The rest of the Graafian follicle is filled up by a yellowish albuminous fluid—the liquor folliculi Graafiani. This liquor takes its origin from the cells of the stratum granulosum, as can be proven by microscopical examination of the different stages of development of these cells. First of all a nucleus is formed out of the blastema of the blood, around which molecular matter is deposited, and from which the amorphous wall and the contents of the cell are separated. The most superficial ones are the most developed.

Their granular contents are changed into a clear albuminous substance, from which the cells become larger and pellucid. These fluid contents pass through the walls of the cell in the shape of clear oily drops, which dissolve after some time in water. In this case the cellular wall contracts, to be filled anew. In other instances the entire cell is dissolved, without leaving any trace, or with continuance of the nucleus, which serves for the formation of a new cell. But not every one of the cells participates in the formation of the liquor, some passing into fatty degeneration, some undergoing no change whatever. This fluid is the original blastema from which the ovulum originated; it further serves as nourishment while the ovum is being developed; and lastly, being increased by direct extravasation from the congested blood-vessels during the catamenia, it expands and finally ruptures the Graafian follicle. The ovum thus set free has to subsist for some days on its own means; for this purpose it takes along a certain number of those cells which cover it, in the form of what is generally called *discus proligerus*.

II.—PREGNANCY AND LABOR.

1. *Dr. L. Gros on the application of pepsine in obstinate cases of vomitus gravidarum* (*Bullet., Génér. de Thérap.*, Feb. 1858).—The author reports seven cases, partially from his own experience, partially from that of other practitioners, where the administration of pepsine cured the vomiting of pregnant women, in some instances where all other remedies had failed to make the slightest impression on the disease. Far from advising its application as a general rule, Dr. G. recommends it for all those cases where the stomach has participated actually in the

morbid condition, be it by an alteration of the secretory activity, or in consequence of its being constantly called to unnatural activity.

2. *Dr. Merteus of Neviges on two Cæsarian operations, with happy result for the mother* (*Organ für die ges Heilk.* 6 Jahrg. 1 H. p. 31).—The cases reported go to show what many obstetricians can confirm by their own experience, that often the most seemingly unfavorable cases result in general satisfaction.

Case 1.—A primipara, 30 years of age, perceived the first labor pains on November 25th, 1856; but during the progress of labor the head became so firmly incarcerated in the pelvis, that the enormous caput succedaneum prevented a closer examination of the pelvic diameters. It was impossible to apply the forceps, and when the child was ascertained to be dead, his head was perforated and diminished, after which the accoucheur was able to perceive that Cæsarian section was even now the only means left for delivering the woman. This was performed in the linea alba. The patient recovered finally, notwithstanding her taking cold three days after the operation, in consequence of which, an obstinate cough, with swelling and tenderness of the abdomen set in. She left her bed after four weeks.

Case 2.—A multipara, who had been delivered two years previously by the Cæsarian operation, was taken sick on January 6th, 1856. The uterus was now situated in a sac formed by the abdominal wall, and extended downwards to the middle of the thigh; the cut ran alongside the linea alba. The womb being very thin, the incision touched the placenta, which was removed immediately with the living child. The patient left her bed ten days after the operation, in consequence of which she caught cold and was taken with inflammation of the left ovary, after which an abscess formed and broke in the vaginal region. The patient also recovered from this accident in three weeks.

3. *Dr. Grimsdale on the use of kali chloricum in pregnancy* (*The Liverpool Med. Chir. Journal,* July 1857).—It often happens that fœtuses reach near the full term when they die without any ostensible cause, or are born alive in such a condition that they perish soon afterwards. Such accidents sometimes happen in every recurring pregnancy, and we are at a loss for the reason. In these instances the author has found the kali chloricum of great use. A healthy looking woman, 24 years of age, bore dead children, in four previous pregnancies, all of which exhibited a yellowish skin. In her fifth pregnancy she was delivered of a weakly child with the same tinge and an enormous placenta and liquor amnii; this child died seventeen days after birth. In her sixth pregnancy she took the said remedy from her fifth month up to the full term, when she had a full-grown, strong, living child. Another woman, 25 years of age, who had always enjoyed good health, gave birth to four dead children, who died shortly before labor commenced. During the following pregnancy she took twenty grains of chloride of potash for four months, and had a healthy strong child. In a third case, a weakly, hysteric woman was delivered in her sixth month of a putrid fœtus; the placenta was partially degenerated. In her second pregnancy she took thirteen grains of kal. chloric.

from the third month, but had to discontinue its use on account of violent headache, owing to its administration. She again had a dead child. During the following gestation she took from three to five grains daily, which she bore well, and all went on favorably, when she had a heavy fall from a wagon, which resulted in the miscarriage of a healthy child, and healthy placenta; in her fourth pregnancy she took the same remedy, and gave birth to a full-grown, living, healthy child. Another woman had been delivered of dead children seven times. During her following gestation she partook of this remedy and gave birth to a healthy living child in her sixth month, in consequence of hard working. [Prof. Simpson has recommended the kal. chloric. before in those cases, where the cause of death is owing to disease of the placenta, such as fatty degeneration, etc. E. N.]

4. *Prof. Hohl on starvation of a child from paralysis of the facial nerve in consequence of a forceps operation (Monatsschrift für Geburtskunde.* Oct. 1857.)—In the report of the lying-in hospital at Halle, a case is related in which the death of a new-born child was brought about in a very unusual manner. A woman, in whom labor was arrested through complete absence of uterine contraction, was delivered by the forceps, the head lying in the pelvic cavity. In consequence of the pressure of the left blade of the forceps, there resulted a paralysis of the facial nerve of the left side, which resisted all treatment. By this the infant was hindered from suckling, as all the milk ran out of the corner of the mouth on the paralyzed side. Everything, prior to being swallowed, had to be placed within the grasp of the muscles of the pharynx. The child was thus gradually reduced by atrophy and died on the twelfth day.

5. *Prof Hohl on a case of incision of the labia majora with rupture of the perineum (Monatsschrift für Geb).*—In a case in which this operation was resorted to by Prof. Hohl in the lying-in hospital at Halle, although five incisions were made, the perineum was torn notwithstanding. "The incisions," says Hohl, "had no other advantage than to make so many wounds the more." [This operation, proposed first by Michaelis in 1797, and not as the reporter of the British and Foreign Review has it, by Scanzoni, is of undeniable value for the said purpose, provided the incisions are made sufficiently large, as the writer can testify by his own experience. Prof. Hohl's communications have to be received *cum grano salis*, as he is too much inclined to criticise and underrate everything that emanates from, or is advocated by the Vienna school. E. N.]

Dr. Schuegel, of Prague, on osseous vegetations of the pelvis, which are apt to shorten the conjugata (*Wien. Med. Wochenschr.* 46, 1857).—While the physiological osseous protuberances are small and of no importance to the obstetrician, the pathological ones, although of rare occurrence, are not only interesting but very dangerous, owing to the enormous size they often attain. The author discovered sixty osseous excrescences on the posterior of the ossa pubis among three hundred pelves examined; their height was from 1‴ to 3‴. In some cases there were found excrescences on the os sacrum, and the last lumbar

vertebra, besides those of the ossa pubis, resulting in a shortening of the antero-posterior diameter, of from 4‴ to 8‴. In one instance the author found very extensive osseous growths in a pelvis of a woman 70 years old, in whom traces were discovered of previous syphilis. The rest of the bony skeleton was free from disease. The body and rami descendentes of the os pubis were covered with a large convex osseous tumor which protruded into the brim of the pelvis as much as 10‴. It was 1″ 2‴ high, and 1″ 5‴ broad, consisting of an outer, dense, white layer, and an inner spongy substance. These different layers formed a perfect continuity with the respective strata of the os pubis. The posterior wall of the symphysis was overbridged by the tumor. The antero-posterior diameter was 3″ 2‴. On the fourth and fifth lumbar vertebra small osseous tumors were also observed. These growths upon the anterior surface of the lumbar vertebræ, as often met with by the author, have been considered as pathological structures in consequence of syphilitic and puerperal periostitis.

III.—PATHOLOGY OF NON-PREGNANT WOMEN.

1. *Leroy de Méricourt on partial blue or black coloration of the skin in women* (*Arch. gén.*, October, 1857).—By an analysis of Drs. Young's, Wilson's, Billard's, and Neligan's cases, to which five new observations are added, the author comes to the following conclusions: The disease, which has only been observed among females, consists of a black or blue color, of one or both eyelids, which in some instances spreads over the face and other parts of the body. The disease is often connected with irregularities in the catamenial functions, with dyspeptic disorders, or blood-spitting. The sputa and the substance thrown up from the stomach contain a peculiar blue matter. The spots in the face increase in intensity, while the patients sojourn in hot rooms, after excitement, bodily exercise, and congestions of the head; while the color gets lighter in the morning and in the cool air. A piece of linen rubbed over the spots takes a blue tint, while the spot itself loses part of its color, which is renewed after five or six hours. The washing or rubbing of the affected place is connected with pain. The inner corner of the eye and the lower lid are generally first taken with the disease, from whence it spreads over the cheek, nose, and so on. The patients look as if they had omitted washing themselves on the places affected. The duration of this complaint was from three months to seven years. Nine out of the ten cases were observed in sea-towns. In regard to treatment, the general state of health, disturbances in the menstrual courses, etc., have to be attended to. Till now, no local remedy has been found of any influence. The names proposed for the disease are: *Blepharomelanosis, Cyanopathie cutanée, Stearrhœa nigricans.*

2. *Dr. Sigmund on the application of caustics upon the inner surface of the uterus* (*Wien. med. Wochenschr.* 40 and 43, 1857).—This treatment was applied in those cases of blennorrhœa and pyorrhœa uteri which resisted the ordinary course of treatment. The *application* of caustics upon the interior walls of the uterus is connected with many difficulties, and the greatest precaution has to be observed in their use.

The author generally proceeds in the following way: After having dilated the cervical canal by compressed sponge-tents, he commences cleansing the inner surface by injections of lukewarm water, which is permitted to flow off through the mouthpiece of the syringe—a double current. He then dries the cervical canal with a brush made of plugged linen. He then injects the caustic fluid (nitras argenti, cupri sulph., zinc. chlorat., or perchlorid. ferri) through a small glass syringe, leaving the mouthpiece with double canula in the womb till all the fluid has escaped. In applying solid caustics to the inner surface of the uterine body, the cervix has to be avoided as much as possible, in order to prevent a subsequent contraction of its cavity. The cauterization being over, the neck of the uterus, as well as the vagina, have to be covered with a medium-sized cotton plug, which ought to be changed, and the parts cleansed every eighth hour. The cauterization is often followed by an increased excretion of mucus or pus, occasionally mixed with blood; by dysuria or costiveness; pains round the lower part of the abdomen or os sacrum; by metritis or peritonitis. These symptoms have to be promptly attended to; and in doing this the author has never seen a fatal result.

3. *Dr. Smith Warner on a case of total occlusion of the vaginal canal for two years—Operation—Death* (*Charleston Medical Journal*, November, 1857).—A negress, aged twenty-two, had two years previously been delivered, after a labor of seventy-two hours' duration, of her first child. She recovered slowly, but had no return of the catamenia, although there was much constitutional disturbance at each monthly period. On examination, there was found no appearance of the vagina, perfect adhesions extending from the fourchette to the meatus urinarius. The uterus was found full by rectal examination, having the weight of a womb three or four months advanced in pregnancy. The operation resorted to consisted in incisions made in the track of the cicatrized tissue, in order to reach the os uteri. A canal was opened seven inches in depth; but the os uteri was not exposed, nor could its exact position be determined. There seemed to be nothing but a thin, distended membrane, forming a wall between the end of the finger and the fluid of the uterus, which lay at the bottom of the artificial vagina. This was punctured by a bistoury, and many ounces of dark menstrual secretion escaped. A silver canula was passed through the opening, which had to be enlarged. This opening afterwards closed up, but the artificial vagina remained open. The uterus was therefore tapped a second time; the canula intended to be left in the new opening, however, slipped out; the trocar was introduced again, with a view to the replacement of the canula. During this attempt, a sudden motion of the patient, and excessive pain, made the operator fear that the trocar had passed through the uterus. The poor woman died of peritonitis on the third day. No post-mortem examination was made.

[This case forcibly illustrates the difficulties and perils of the operation for establishing a new vagina and restoring the natural channel for the catamenia, in cases of extensive adhesions; and its communication is more valuable than a hundred records of successful operations.

E. N.]

4. *Dr. H. Oldham records two cases of retention of the menses relieved by puncture through the rectum, in Guy's Hospital Report.* The first was the result of congenital absence of the vagina, the second of closure of the vagina after labor, by adhesion of its walls and cicatrization. In both cases the operation was successful; and in the former the patient continued to menstruate regularly per rectum.

5. *Dr. Breslau on a case of perfect incontinentia urinæ, cured by the removal of both hypertrophied nymphæ.* (*Scanzoni's Beitrage zur Geburtskunde.* B. 3, 1858).—A woman who suffered from constant stillicidium urinæ since her last confinement, complained of a very distressing irritation around the pudenda, and a feeling of bearing down in the lower pelvis. When examined, the circumference of the external genita's and the inner surface of the thighs were found excoriated, very painful to the touch and drenched with urine. Both nymphæ were considerably thickened and several inches long, while the orifice of the urethra was enlarged, so as to admit the introduction of the fifth finger. A vaginal examination discovered nothing but slight leucorrhœa. Therefore Dr. Breslau thought that the enormous hypertrophy of the nymphæ had a paralyzing influence upon the urethra in dragging the latter constantly downwards. This was confirmed by the report of the patient, who felt the greatest distress when she was in an upright position. Under this impression, Dr. B. removed one of the nymphæ by the écraseur, and the other some time afterwards by galvanocaustic. The patient left the hospital entirely relieved of all her ailings.

6. *Dr. Gustav Simon. An analysis of* 61 *cases of ovariotomy, performed in Germany* (*Scanzoni, Beitr. zur Geburtsk.* B. 3, 1858).—This review of operations performed by German surgeons has been prepared with a great deal of care and judgment, in order to establish the true value of the operation. It contains not only those cases which have been published previously, but besides, 23 cases are added which were communicated to the author by private letters, mostly from the operators themselves. In reporting each case, he does not confine himself to short notices, but gives a history of every one of them. The results of the operations are divided under three heads, viz.: 1. Operations followed by a radical cure. 2. Operations resulting in death. 3. Operations from which the patients recovered at first, the ultimate good result of which was only temporary, dubious, or of no consequence at all. In the latter division are counted those cases where the operation had to be given up in consequence of too strong adhesions or a wrong diagnosis, or where the patients died at a later period from the operation, or from the original disease.

In all the former statistics (American, French, English) the cases coming under No. 3 are reported among the successful operations. Dr. Simon's analysis should therefore claim the undivided attention of the profession. Moreover, as most of the operations were performed at a recent date and by eminent surgeons, good diagnosis, scientific performance of the operation, and skillful after-treatment, were commonly secured.

Results: Of 61 patients operated upon, 44 died immediately after

the operation, or $72\frac{3}{51}$ per cent. In 5 patients the operation was of transient or no benefit at all, and only 12 were radically cured, or $19\frac{11}{51}$ per cent. These results are by far less favorable than those of former statistics, and, from a comparison, ovariotomy is more dangerous than the Cæsarian section, because only 63 per cent. died in consequence of the latter, according to Dr. Kaiser's statistics, or about $\frac{2}{3}$ per cent., according to some other authors. (See Naegele's *Geburtsk.* B. 2.)

7. *Dr. C. Mayer on hypertrophy of the uterine neck as complicating prolapsus uteri and its treatment* (*Monatsschrift f. Gebr.* March, 1858).—At a meeting of the Berlin Obstetrical Society, Dr. Mayer read a paper on the removal of the uterine neck for the cure of prolapsus. In those cases of falling of the womb which are accompanied by enlargement of the neck of the uterus, every sort of mechanical treatment is contra-indicated, partially because the pessary cannot be placed in a fit position, partially because in most cases it can be endured only for a short time, owing to the great pain following its application. The best and safest remedy for this hypertrophy is amputation of the neck, which has been executed several times by Dr. Mayer. In performing it, the womb is drawn downwards as far as possible by strong hooks, and the diseased portion removed by the knife. This is generally followed by profuse hemorrhage, which is promptly arrested by the actual cautery. The after treatment is that of a plain cut wound; pledgets of lint, well covered with oil, are applied to it; the vagina is to be cleansed frequently by injection; the wound to be brushed over with a solution of nitrate of silver, and the womb, which generally contracts after the operation, to be retained by a lint plug.

These views were illustrated by the report of a number of cases in which this operation was performed, and have proved successful. In a discussion which followed, it was suggested and accepted, that these operations might have been performed, just as safely, if not more so, by the écraseur.

[That the écraseur is a good thing, generally speaking, we are satisfied. Its application is now in the very height of fashion; but when the excitement has cooled down, its use will be restricted to the proper cases. The writer is of opinion that the amputation of the neck of the uterus for curing prolapsus, when executed by the knife and actual cautery, will be followed by better results than when performed by the écraseur. In the cases referred to, the entire womb participates more or less in the hypertrophy of the neck, and therefore, a good depletion following the cut, and the application of so strong an agent as the hot iron, must be of good service to the remaining diseased portion, while the écrasement is followed by scarcely any reaction. E. N.]

8. *Du phlegmon péri-utérin.* By Dr. Gallard. (*L'Union Méd.*, Feb., 1858).—The phlegmon periuterin presents itself in three different forms: the acute form, the chronic form, and the subacute, or chronic with periodical exacerbations. Of these different turns which the disease may take, that of a thoroughly chronic character is very rarely seen, and its existence even not acknowledged by some authors, such as Gallard. From an analysis of 53 observations, the author considers

the following circumstances as the most frequent causes of the disease: confinements, miscarriages, previous inflammation, the menstrual congestion, over-exertion, often repeated connection, metrorrhagia, leucorrhœa, inflammation of the uterine or vaginal mucous membrane. By vaginal examination, one may find a pulsating tumor, with increased temperature, behind the cervix, or a circular soft ring, or a diffused exudation, which surrounds the womb so as to render it immovable and fixed in the small pelvis; by examining through the rectum, one is able to trace the limits of the affection; by a combination of both, it is possible to appreciate the state of tension and thickening of the recto-vaginal sac. The different affections which may be mistaken for the disease, are metritis, oöphoritis, hematocele retro-uterina, the different dislocations of the womb, accumulation of fæces in the rectum, and fibrous tumors.

In regard to treatment, the symptomatic metrorrhagia often resists the most powerful remedies. The plugging has to be avoided as much as possible, while the tincture of cinnamomum, as prescribed by Gosselin, has been found to answer very well, if administered in large doses.

9. *Dr. Gallard on the causes, seat, and treatment of hematocele retro-uterina.* (*L'Union Méd.*, Feb., 1858).—The knowledge of this affection is of quite recent date. Before the discussion of the Société de Chirurgie, in 1851, only few observations, besides that of Ruisch and Deneux, had been published. In 1848, Dr. Bernutz, while reporting a similar case like that of Ruisch, offered the following explanation for the origin of these blood-tumors: If the menstrual blood is retained in the uterus by some cause or other, it flows back through the Fallopian tubes into the abdominal cavity. Dr. Gallard believes that this, far from being the general rule, may happen in a few exceptional instances. In 1855, Dr. Laugier read a paper on this same subject before the Académie des Sciences, in which he proposed the following explanation: The ovarian congestion is always the predisposing cause; the spontaneous rupture of a Graafian vesicle, and the accidental rupture of some ovarian vessels, are the occasional causes. The ripening of a Graafian vesicle is accompanied by a certain physiological congestion, and its rupture is followed by a slight hemorrhage, the result of which is the corpus luteum. If the congestion is unnaturally strong, and if a permanent or accidental predisposition to hemorrhage is present at the same time, a larger quantity of blood will be discharged and deposited into the retro-uterine peritoneal cul-de-sac. During the interval of the catamenial courses, the hemorrhage will stop, but return at the next period. In other less frequent instances, the ovary is the seat of a strong congestion, produced from often-repeated excitements, or pregnancy, and especially so from extra-uterine conception. In this state of things, a fall, or an insult, or a long walk, are sufficient to rupture the turgid ovary on its point of least resistance—that is, where the blood-vessels enter its texture. In consequence, a certain quantity of blood will be discharged into the cellular tissue of the ligamenta lata, and if the hemorrhage is abundant, one of the peritoneal folds

will rupture, and the blood enter into the abdomen. These views are fully indorsed by Dr. Gallard. The obliteration of the Fallopian tubes has been pointed out as one of the causes of pelvic hematocele. Still the author considers this conclusion as resulting rather from inflammatory action following the hemorrhage.

The tumors in question are at times of intra, at times of extra-peritoneal origin, and in a few instances they start without the peritoneum, and enter suddenly into its cavity. During life it is generally impossible to diagnosticate their exact seat; still Dr. Huguier thinks that a bluish-red color of the vulva is a valuable sign for extra-uterine tumors. Dr. Prost, in a recent article on this subject, holds that elevation of the uterine neck indicates an intra-peritoneal location, while its depression proves their extra-peritoneal character; but as a general rule, the uterus stands neither higher nor deeper.

No satisfactory rule has yet been laid down for the treatment of these hematoceles. Lately the bistoury or trocar has been employed in cases demanding their use; but practitioners are cautious of surgical interference, on account of the evil events which it frequently gives rise to. Yet some of the most menacing cases have healed by resorption, or by evacuation into the rectum.

10. *Dr. Herzfelder on retro-uterine hematocele.* (*Monatsschrift für Geburtsk*, October, 1857.)—M. St. ——, aged eighteen, having always enjoyed good general health, but suffering from irregular menstruation, was admitted into the hospital with acute pains in the rectum and sacral region, which were relieved only by rest in a horizontal position. Examination revealed a round, somewhat tense, painless swelling, stretching from the pelvic brim to a point midway between the ensiform cartilage and umbilicus. It was about seven inches wide, and lay rather more on the right side. Vaginal examination revealed a conical swelling, with the apex downwards, quite filling the right pelvic half, and narrowing the vagina very much. The meatus urinarius was drawn up under the pubic arch. This swelling was distinctly fluctuating, and ulcerated at the lower end. By pressure from without inwards, the swelling was movable. The absence of previous inflammation, the mobility of the tumor, the age and strength of the patient, excluded the idea of abscess, caries, carcinoma, fibrous tumor of the uterus, and ovarian cyst. There only remained the probability of a uterine hematocele, that is, a menstrual effusion of blood into the cellular tissue around the uterus. Puncture verified the diagnosis. About a pound of tenacious, dark-red blood was evacuated, after which the patient quite recovered, so that at the end of four months no fresh excretion was observed.

[Though many points in regard to diagnosis and definition of hematocele are wanting in the author's record of the case, it is an important addition in regard to the question of treatment. E. N.]

Report on the Progress of Infantile Pathology and Therapeutics; prepared for the NEW YORK JOURNAL OF MEDICINE. By A. JACOBI, M.D., Physician to the Children's Department of the German (Canal street) Dispensary of the City of New York.

I.—DIGESTIVE ORGANS.

1. *New operation for hare-lip (London Lancet,* Am. ed., 1858, p. 413).—Allen Duke operated on four children, whose ages varied from six weeks to five months, in the following manner: "the edges pared, not in the usual way, but by an oblique incision from before backwards, slightly concave, and the reflecting-bands of mucous membrane, freely divided, are to be brought neatly together by two or more sutures, each armed by two curved needles, which are to be introduced immediately under the skin, carried completely through the remaining thickness of the lip, and firmly tied *internally.* To facilitate the removal of the two upper ones, the ends of the sutures should be brought out at the angle of the mouth, and secured externally by adhesive plaster, strips of which are to be applied the more firmly to bring and retain in contact the skin. The sutures may be safely removed in the course of a few days. Should there be a fissure of the jaw, and any portion unnaturally project, it should not, as is usually recommended, be entirely cut off, but partially severed, the edges pared on both sides, and neatly adjusted by sutures, in order to fill up the vacancy, and preserve the natural rotundity of the forepart of the jaw, previously to operating on the soft parts."

2. *Death by suffocation after the operation for hare-lip.*—Professor Busch, in his book on "Surgical Observations" (1854), directed the attention of the profession to the fact, that infants, accustomed to breathe while the mouth is closed, through the large abnormal opening, keep the mouth closed also after the operation is performed, and are subject sometimes to fits of suffocation. Such a case is reported by Prof. Volkman (*Monatsschrift für Geburtskunde und Frauenkrankheiten,* 1858, No. 5, p. 353) which resulted in the death of a boy of one year of age. Dr. Gurlt has seen similar cases.

3. *Atrophia.*—Dr. Küttner, of Dresden, publishes (*Journal für Kind.,* 1858, March and April, p. 184), some valuable remarks on what he prefers to call dystrophia of infants. Genuine dystrophy, pædo-dystrophia, pædatrophia, is the low state of nutrition and the general exhaustion, which are caused by insufficiency of food, either as to quantity —simple dystrophy—or as to quality—dyspeptic dystrophy. This genuine dystrophy differs much from the cases of emaciation and exhaustion which are merely symptomatic, and the secondary consequences of some local affection of the digestive or respiratory organs, or of syphilitic or tuberculous etc. dyscrasies; in dyspeptic dystrophy the author recommends, as a tonic and stomachic, eight to ten drops of Malaga, Hungarian, or port wine, to be taken three or four times a day.

4. *Atrophia in consequence of chronic intestinal diseases; atrophia en-*

terica.—Dr. Lederer, of Vienna, (*Wiener Medicinische Wochenschrift*, 1858, No. 17, p. 276), recommends the cautious use of opium in almost all the symptoms of enteric-atrophy, particularly where pain and sleeplessness are injuring the strength and recovery of the patients. Sometimes warm poultices, applied to the abdomen, and warm baths, have the same favorable effect. Diarrhœa requires the use of nitr. arg., nux vom., and tann. ac. The best food for small children is breast milk, raw beef is digestible only in the beginning of the disease; carrots are more injurious than wholesome. Baths with milk, beeftea, also the embrocation of liquid fats have a good effect.

5. *Tænia solium.*—Dr. Paasch, of Berlin, publishes (*Journ. für Kind.*, 1858, March and April, p. 207), the case of a child 21 months old, who suffered for six days, from the symptoms of what seemed to be a severe intestinal catarrh, which were prescribed for. On the following morning a complete tænia, head and all, was removed with the fæces.

6. *Temporary paralysis of the cæcum.*—Prof. Clar, of Gratz, (*Jahrbuch für Kinderheilkunde und Physische Erziehung*, 1857, ii., p. 79), publishes an article, from which he draws the following conclusions: first, a frequent cause of typhlitis and perityphilitis is the temporary paralysis of the cœcum and vermiform process. Second, therefore a cure before the beginning of inflammation, is of the highest importance. Third, the treatment ought to be resolvent and evacuating, also subsequently stimulating the intestinal function, always having regard to the imminent danger from inflammation. Fourth, injections are important prophylactics against, and remedies for, the temporary paralysis of the cœcum, since they reach the diseased part in a quick and safe manner, and without any danger to the organism. In general, Prof. Clar warmly recommends injections in diseases of children, in order to produce effects as well on the diseased intestines, as on the intestinal contents, and on other suffering parts of the organism.

7. *Perforation of the vermiform process.*—A. Mertens, (*Journ. für Kind.*, 1858, March and April, p. 161), publishes four cases of this disease, all of them resulting in the death of the patients. They occurred in males of 9, 18, 4, and 5 years of age. The cœcum took little or no part in the disease, just the reverse of what Copland reports to have occurred in his cases, (*Dict. of Pract. Med. Art. cæcum*). The majority of cases reported in the medical journals occur in young persons. The usual result of foreign bodies lodging in the vermiform process, is death, in consequence of a very dangerous reaction following, which fact proves by itself, that the process has a function of its own. The author is inclined to attribute to it a function analogous to that of the pancreas; it is said to complete the cœcal digestion in a similar manner, as the pancreas completes the duodenal one. He believes that he has found, on the cœcal part, bundles of circular fibres, constituting as it were an orbicular muscle. A case of perforation of the vermiform process, produced by impacted fæces, is reported also by Prof. Clar. (*Jahrbuch für Kinderheilkunde und Erziehung*, 1857, ii., p. 86). The patient was a boy of five years of age.

8. *Proposed modification of the operation for imperforate anus* (*Edinb. Med. Jour.*, March, 1858, p. 807).—Dr. Hermann Friedberg (*Chirurgische Klinik*, 1855, i. p. 165–224) recommends the method of Amussat, viz.: bringing down the gut when an opening has been made in it, and stitching it to the outlet in the perineum. The advantages are that there is a mucous membrane lining the whole tract of the canal; that the evacuations are more easily accomplished; that the natural tendencies in canals, not so provided, to gradually contract, is prevented; that the irritation and danger arising from the contact of effete matter with tissues not intended for such contact is also obviated. Redfern Davies thinks success more probable by often repeated, almost imperceptible, tractions upon the gut, than by trying to bring it down at once. Such is the modification he recommends. The idea has been taken from a case operated upon in a similar way and successfully, which has been described in the *Lancet*, 1846.

9. *Ascites Congenitus* (*Monatsschrift für Geburtskunde und Frauenkrankheiten*, 1858, xi. 3, p. 161).—R. Virchow reports the case of an infant, born with ascites and hereditary peritonitis. The mother, about 30 years of age, had six children, the first of whom is about 12 years old, and healthy; but the last three died pretty soon after birth, and had, each of them, the abdomen swelled by dropsical accumulation.

10. *Swallowing needles.*—Dr. Edgren (*Jour. für Kind.*, March and April, 1858, p. 168) reports two cases of children swallowing needles without unfortunate consequences. A boy, 3 years old, swallowed a needle 2½ or 3 inches in length, which a month later penetrated the skin, near the sternum, from beneath the pectoral muscle. A boy of 4 years of age, swallowed a large pin with a big head, the head going down first. On the third day after there was pain in the right side, about the region of the pylorus and duodenum. On the eighth day the head was removed from the anus, only an inch of the pin being in connection with it.

II.—UROPOIETIC AND SEXUAL ORGANS.

1. *Stones in the bladder in Hungary* (*Allgemeine Wiener Medicinische Zeitung*, 1858, No. 13).—Of 135 cases of stone in the bladder, treated by Prof. Balassa, of Pesth, twenty-one occurred in persons under 7 years; thirty-two from 8 to 15 years. Besides, forty-nine children have been treated for the same disease in the children's hospital of Pesth, during the years 1843–1855. Children in early life and with coarse diet are most subject to stone; this fact Prof. Balassa explains by inadequate food, children, after having been weaned, being nourished with herbs, potatoes, etc., which contains a large quantity of carbon. Thus, carbon forms the principal part of urinary calculi in Hungary. The majority of Balassa's consisted of oxalic salts. Of twenty stones having a nucleus differing from the mass, the nucleus was of oxalates in twelve, of uric matter in eight, wherefrom the conclusion may be drawn, that oxalates and urates give the impulse to the formation of stone, posphates only increasing its bulk. The sound produced by the probe is of some diagnostic importance; the sound being sharper with oxalic

stones, which are harder ; duller with phosphoric stones, which are less hard and dense.

2. *A cystiform expansion of the right ovarium, by extravasated blood* in a stillborn child of seven months was reported by B. Schultze (*Monatsschrift für Geburtskunde und Frauenkrankheiten*, 1858, xi. 3. p. 170). The tissue of the ovary was torn and broken, in some parts scarcely perceptible, by blood both fluid and coagulated, and fibrous coagulations.

III.—ACUTE EXANTHEMS.

1. *Acute exanthems combined with traumatic injuries.*—It is but natural that acute exanthems, when following, or combined with acute inflammatory, and febrile diseases, should be of a highly dangerous character. But merely local inflammations also, which have been produced by local influences, apparently of no importance, seem to give a bad prognosis, when followed by an acute exanthem. Some cases, which elucidate this assertion, have been published by Dr. Paasch, (*Journ. für Kind.*, March and April, 1858, p. 203).

2. *Variola in newborn infants (Zeitschrift der Gesellschaft der Aerzte zu Wien*, 1857, No. 13).—A female child (premature) was born, on the 25th of Febr. 1857, with variola vera, forty-six pustules being found when the child died, thirty hours after birth. The mother was a healthy primipara, 28 years of age. While in the hospital, she was for a short time in a room with patients affected with variola ; two pustules of variola made their appearance on her, while she was under the endemic influence. Eight days after her being wholly recovered she was sent to the lying-in hospital where she was confined. She remained in good health afterwards.

A case similar to this, which is reported by Dr. Wallman, has been under the observation of Prof. Hebra. The mother was confined while suffering from variola. The child affected with pustules of variola in different stages of development, was stillborn.

[Variola in newborn children being a very rare occurrence, we communicate to the profession the following case, which Dr. Michaelis, of Attorney st., kindly allowed us to publish. We have to add that this is the only case which Dr. Michaelis, who is engaged in a very extensive obstetrical practice in this city, ever saw. We take the following particulars from a letter of Dr. Michaelis: "Mrs. H . . ., of 104 Attorney st., primipara, gave birth on the 12th of May, to a male child, who lived only a few moments and was covered with variola, most extensively so on his face and thorax. There was nothing abnormal about the confinement, except an uncommon painfulness of the back. The pustules of variola appeared to be in the sixth or seventh day of their development. The mother was not, nor had she been during her pregnancy, suffering from variola or varioloid, or, as far as could be learned, from varicella, but there is one interesting characteristic fact in the history of her pregnancy. When in her fourth month, she was present at the death of a child, who died from variola. For full four weeks she felt exceedingly sick, suffering from repeated chills, and was

continually afterwards afraid of having variola. Her pregnancy took a favorable course. A. J.]

3. *New instrument for vaccination (London Lancet*, Am. ed., 1858, p. 459).—This is the invention of Mr. Borham, London, and is a small instrument, convex above and concave below, so as to adapt itself to the configuration of the child's arm, where, by pressing it, a ridge of skin is formed, into which the lancets can be made to penetrate by means of a cogwheel. There are sets of lancets which are grooved at the points, so as to retain the virus more completely.

4. *Coincidence of variola and vaccina* (M. E. GINTRAC in *Journal de Médecine de Bordeaux*, March, 1858; *Gaz. Hebdom. de Méd. et de Chir.*, 1858, No. 15).—The facts, as elucidated by a large number of citations are the following: Where variola sprung up, after vaccina had begun its course, vaccine has been either completely kept back or interrupted even as long as the course of variola lasted, or has taken a slower development. Thus there is a decided influence of variola on the invasion and development of vaccina; there is also an influence on the form of the pustules, which may undergo great modifications, viz.: 1. A diminution, or even a complete absence of the variola; 2. A diminution or absence of the subjacent induration and tumefaction; 3. An imperfect development of the pustules as to color, and size; 4. In some cases a suppuration analogous to the one in discrete variola. Notwithstanding such modifications, the fluid contained in the pustules was apt to transmit the contagion. Vaccine, too, may modify variola, the more so the nearer it is to its regular termination. 1. Inoculation of variola, performed after the ninth or eleventh day of vaccination, is not successful. If performed on the fourth, fifth, or seventh day, it sometimes produces pustules, which do not contain, however, fluid matter, and are prone to desiccate on the seventh or even fifth day. 2. James Boyce observed, that the pustules of variola, inoculated after vaccination, are very much like vaccine pustules. 3. Variola occurring after vaccination always took a mild course, even when in the neighborhood or the same house, there was confluent variola. 4. Cases of variola have been observed to begin with a high fever and dangerous general symptoms, which diminished as soon as vaccine began its course. 5. Variola after vaccination has no secondary fever, no swelling of the face, no ptyalism. 6. Its duration has been brought down to eight, six, five, even four, days.

5. *Prophylactic treatment of scarlatina (Gaz. Hebd. de Méd. et de Chir.*, 1858, No. 18).—Raoul Leroy (d'Etiolles) asserts the efficiency of belladonna as a prophylactic against scarlatina; being convinced by his experience and experiments that wherever it is unable to keep the disease entirely out of the way, it at all events, renders each individual case milder and safer. Leroy puts no confidence whatever in some remedies recommended for the same purpose formerly; as, for instance, sulphurous or nitrous fumigations, lemonades of mineral acids, purgatives, calomel, sulph. aur., etc. As to *inoculation*, he feels satisfied that it is not deserving of any confidence, nor the recommendations of Miguel, Noirot, Petit-Radel, and Home.

6. *Recidive measles.*—Drs. von Düben, Malmsten, Böttiger, and Levin, of Stockholm (*Journ. für Kind.*, 1858, March and April, p. 172) report about ten cases of measles occurring twice in the same children, the intervals between the first and second times being from four or five days to some months. Dr. Malmsten saw measles in a man who was positive about having suffered from the same exanthem twice before.* The same writer reports to have inoculated measles in his two sons, the exanthem making its appearance on the fourth day after the inoculation being performed.

7. *Relation between scarlatina and morbilli.*—Dr. R. Küttner, of Dresden (*Journ. für Kind.*, 1858, March and April, p. 180), does not consider both of these exanthematic diseases to be so different from each other as Schoenlein thought they were, when he counted morbilli amongst the catarrhal, and scarlatina amongst the erysipelatous families of diseases. He at first points out such cases, which show the exact symptoms of neither scarlatina nor morbilli, and are often described under the denomination of rubeola (see *N. Y. Journ. of Med.*, May, 1858, p. 420). Then he refers to some facts laid down in medical literature, the number of which he augments by a singular case observed by himself, proving that the same contagion produces either scarlatina or morbilli in different individuals. How this could be done he does not venture to say; but it does not seem to be impossible for the organism to alter a contagium penetrating the whole system. A severe cold, for instance, produces rheumatism in one, catarrh in another individual.

IV.—CIRCULATORY ORGANS.

Sanguineous cavernous tumor above the root of the nose in a new-born infant (Zeitschrift der Gesellschaft der Aerzte zu Wien, 1858, No. 14).—Drs. Valenta and Wallmann report a case of erectile tumor, angioma, which rose from the pia mater, and being enveloped by the dura mater, penetrated through a fissure between the frontal, ethmoid, and nasal bones. An erectile tumor of the pia mater, on the surface of the left hemisphere, has been described by Rokitansky (*Handbuch der Pathologischen Anatomie*, ii., p. 735); but in general such cases are very rare. Cases of encephalocele on the same place where our erectile tumor was found, have sometimes been reported. Wallmann relates a case of hydromeningocele in the same locality, which he found in an idiotic female of fifty years of age.

V.—RESPIRATORY ORGANS.

1. *Tumor in the trachea (London Lancet*, Am. ed., 1858, p. 363).—In the Harveian Society, Dr. Fuller referred to a case, in which there was a large scrofulous tumor in the trachea, accompanied with a croupal sound during expiration, in contradistinction to the inspiratory sibillation of genuine croup.

---

* The reviewer remembers well the case of a child, about two-and-a-half years old, whom he saw suffering from measles two different times in the course of a year. Moreover, he was told, that some months before he first saw the child it suffered from a like attack.

2. *New instrument for performing tracheotomy (Gaz. Hebdom. de Méd. et de Chir.*, 1858, No. 17).—Mathieu exhibited before the Paris Academy of Medicine, on the 22d of April, a new instrument, which was very much like a *lithotome caché*, by which he claims to perform the incision of the trachea in a safer and quicker manner than by any one else. We shall give a more extensive report after it has been sufficiently tested and proved satisfactory.

3. *Croup.*—Dr. Hauner (*Journ. für Kind.*, 1858, March and April, p. 209), one of the best, perhaps the best, clinical teacher of diseases of children, when refuting some theses published by Dr. Luszinsky (see *N. Y. Jour. of Med.*, March, 1858, p. 282), gives the following aphorisms, embracing the contents of a work soon to appear: 1. Genuine (laryngeal) croup is a disease peculiar to infantile age; its cause is to be looked for in the organization (stage of development) of the infantile larynx. 2. Anatomy and physiology will probably elucidate its nature. 3. There is no proof that croup is produced by a peculiar crasis (abnormal elasticity) of the blood. 4. Genuine croup always commences in the larynx, and many times migrates downwards, but in no case upwards. 5. A Pseudo-membrane, large or small, is a characteristic of croup. 6. Diphtheritic croup differs much from laryngeal croup, and usually is the consequence of, or connected with, a peculiar crasis of the blood, which is known also in other organs. 7. Thus diphtheritic croup is almost always secondary, and is essentially not very much different from croup following acute exanthems. 8. Diphtheritic croup usually commences in the fauces, on the uvula, tonsils, etc., migrating downwards; very seldom it commences in the larynx and trachea. 9. The symptoms of a violent laryngeal catarrh are very similar to those of genuine or diphtheritic croup; but there is never a false membrane in catarrh. 10. Such cases are very often considered to be, and are described as, croup. 11. There is no specific remedy against genuine croup; therapeutics have to undergo modifications according to the individual case. 12. In the average of cases, emetics, cold, mercury, bloodletting, will do good. 13. In certain cases of laryngeal and tracheal croup, the operation is indicated. 14. Diphtheritic croup requires cauterization, emetica, alkalies, tonics—in no case calomel, bloodletting, vesicatories, or purgatives. 15. In diphtheritic croup, tracheotomy is seldom indicated, particularly because of the rapid spreading of the diphtheritic process. 16. If it has been made, cauterization has to follow it. 17. The most violent laryngeal catarrh does well with an appropriate regimen and anti phlogistic treatment. The proof of this is the great number of so-called cases of croup which are reported to be cured.

4. *Croup and pseudo-croup.*—Dr. Kerli (*Deutsche Klinik*, 1858, No 5–7) states the same difference between the genuine croup and laryngeal catarrh (pseudo-croup), which has the cough of croup without any false membrane. Sometimes the "spasmodic pseudo-croup" (Millar's asthma) also shows the symptoms of croup, and has been sometimes observed to precede genuine croup for some days.

5. *Cold water and sulphate of copper in croup.*—Dr. Pudon (*Journ. für*

Kind., 1858, Jan. and Feb., p. 1) publishes some cases of croup where the local application of cold water, made after Priessnitz, and emetics of sulphate of copper, were sufficient to cure even severe and obstinate attacks.

6. *Tartar emetic in croup.*—Dr. A. Kortüm (*Deutsche Klinik*, 1858, No. 20) considers tartar emetic as the very best remedy in croup, but gives it in another way than it is usually prescribed. He prescribes for a child of one year of age, from $\frac{1}{16}$ to $\frac{1}{8}$ grain every two hours; for older ones, comparatively larger doses, thinking the alterative effect on the blood most important, and nothing less desirable than the mere emetic effect in the shortest time possible. The author seems to be almost positive about the favorable result, but considers new attacks imminent, as long as the purgative effect of the medicament has not also showed itself.

7. *Local applications in croup.*—E. H. Mayer (*Am. Jour. of the Med. Sc.*, April, 1858, p. 338) feels bound to recommend glycerine as a local application to the rima glottidis, from whence it is expected to glide down into the larynx. John D. Shetton (*Am. Jour. of the Med. Sc.*, April, 1858, p. 340), reports to have applied, in a few severe cases, with a favorable and even unexpected result, an ointment of extr. bellad. and ungt. hydr., either to the sound skin over the trachea, or to a blistered surface.

8. *Fatal enlargement of the thymus gland with subjacent tumors.* (Dr. Hartshorne in Trans. of the Coll. of Phys. of Philadelphia, *Am. Jour. of the Med. Sc.*, April, 1858, p. 378.)—The child was five months old; it had always appeared to be healthy and well developed, and presented no symptoms of disease to attract attention up to the moment of death. It was suckled by its mother at two o'clock of the morning of its decease, when it went to sleep as usual. At about seven A.M. it was found dead, lying on its back, with blood about the nostrils, and the jugular veins distended. Examination of the body displayed no peculiarity, except the morbid alteration of the gland, and the results of its pressure upon other parts. The heart was forced down close upon the diaphragm. The vena cava descendens contained an unusual quantity of blood. The thymus was very much enlarged, and below the proper gland, but connected with it, and inclosed in a continuous enveloping membrane, was a mass whose appearance and consistence resembled those of fatty structure, and which, when shrunk under the influence of alcohol, had 3 inches in perpendicular length, 2 inches in width transversely, and $\frac{7}{8}$ of an inch in antero-posterior thickness.

VI.—NERVOUS SYSTEM.

A monster of the genus peracephalus (*Am. Jour. of the Med. Sc.*, April, 1858, p. 70.)—Dr. Walter F. Atlee gives the following account: "The monster has no head or upper extremities. The trunk and lower extremities are of a size corresponding to those of a well formed fœtus of seven months. A want of perfect symmetry, however, is very manifest in the two halves of the trunk, which is remarkable for a number of elevations, with depressions between them. These elevations are

due to the accumulation of a great quantity of cellular tissue. This sort of lumpy condition exists likewise in the lower limbs, which present, in addition, several other imperfections. The feet are turned inwards, and they possess but four toes, two of which, the smallest, on one foot, are not separated. The external organs of generation are those of the female; the anus exists. Upon the front of the trunk, between the umbilicus and its upper extremity, is something having the appearance of a small empty bag or bladder, attached by a rather narrow pedicle. Both above and below this bag is a small tuft of hair. Towards the sides of the thorax, in the place usually occupied by the nipples, are small round orifices."

VII.—MOTORY ORGANS.

Congenital luxation of the patella.—A case of congenital luxation of the patella upwards, caused by the abnormal length of the ligg. patellæ propria, has been observed by Dr. Ravoth, of Berlin (*Monatsschrift für Geburtshülfe und Frauenkrankheiten*, 1858, No. 5, p. 340). Two other cases have been published in *Deutsche Klinik*, 1858, No. 4, by Ravoth, and in No. 48 and 49 by Eulenburg.

VIII.—DYSCRASIC AND TOXÆMIC DISEASES.

1. *Two cases of diphtherite* (*London Lancet*, Am. ed., 1858, p. 423).—Bernard M. Browne reports two deaths by diphtheritic dissolution of the blood, on which cases he looks as a new disease, though allied in some of its character to malignant "scarlet fever." [Rapid deaths by diptheritis seem to be very rare occurrences in Great Britain, which is an interesting fact as to nosogeography. Thus, after all, an English physician may be excused for never having seen the disease in question, but not for the total want of knowledge of its existence. For there is scarcely a manual on the diseases of children on the continents of Europe and America, and in England too, that would not state the fact, that some cases of diphtheritis faucium have such an asthenic, adynamic type, and go along with such a general depression of every vital function as to cause death in a short time, without apnœa or any visible material change in the organic structure of the body, except the diphtheritic exudation on the fauces. Such cases are to be considered as proofs of a rapid dissolution of the blood, similar in its effect to the typhous one. The same want of knowledge of their own and foreign literature has been shown by the Medical Society of London, where Dr. Camps read a paper on the same subject (*London Lancet*, Am. ed., 1858, p. 433). See also the Manuals of Rilliet and Barthez, Bouchut, Bednar, Hennig, Schnitzer and Wolf, Coley, West, Churchill, Evanson and Maunsell, even Underwood, Condie, Meigs, etc. Hamilton's paper in *Ed. Med. J.*, vol. ii., p. 235. Bretonneau, *Des inflammations spéciales du tissu muqueux, et en particulier de la diphthérite.* Verson, *der Arzt am Krankenbette der Kinder*, etc. A. J.]

2. *Intermittens larvata bihebdomadaria.*—Dr. Gabriel reports (*Jour. für Kind.*, Jan. and Feb., 1858, p. 131) the case of a boy of fourteen years of age, who had been suffering, for the last two and a half years,

from headache and vomiting, every fourteenth day, which was always Tuesday; the boy being entirely well the other thirteen days. He soon recovered after taking chin. and ac. arsenicos.

3. *Hydrophobia.*—A case of hydrophobia, observed by Prof. Santesson, of Stockholm (*Journ. für Kind.*, March and April, 1858, p. 173), occurred in a girl eight and a half years old. The disease showed itself on the forty-fifth day after the child had been bitten, and resulted in death after two days' intense suffering. Post-mortem examination eighteen hours later: Considerable rigor in the maxillar joints, the joints of the lower and particularly the upper extremities being somewhat more flexible. When the external integuments were being incised, there was a smell of chloroform, which the child had inhaled before death. The inner side of the galea, corresponding with the spot where the child was bitten, had its blood-vessels pretty much injected with blood; also the cranium was, in the corresponding part, somewhat exfoliated. The cerebral membranes were normal, the venous vessels of the arachnoide, particularly on the basis, abnormally filled with blood. The cerebral substance was normal, a little hyperæmic; the lateral ventricles contained some clear serum; the choroid plexus of the right lateral ventricle was somewhat extended by serum. When the thorax was being opened, the lungs did not collapse; after an incision was made, a large quantity of a dark fluid blood effused; the right lung adhered to the thoracical pleura by old adhesions; its middle lobe was almost entirely collapsed; the bronchia, in this part, were dilated and filled up with a purulent liquid. On the outside of one of them was a calcareous concrement of the size of one half of a pea. The mucous membrane of the larynx was pale, of the trachea red, and everywhere below the bifurcation, in all the bronchia, highly ingested. The left lung showed interlobular emphysema. The heart was normal and contained liquid blood and fibrinous coagulations. The mucous membrane of the fauces was not particularly injected; the tonsils were swollen; when incised, a purulent fluid escaped. The superior surface of the tongue was pale and covered over with some mucus; the inferior surface showed no blisters of any kind or size. There were some erosions on the mucous membrane of the stomach, particularly near the pylorus. The intestines and spleen were normal, liver and kidneys normal, but hyperæmic.

Minutes of the Eleventh Annual Meeting of the American Medical Association, held in the City of Washington, May 4, 1858; condensed from the official report in the Med. and Surg. Reporter.

THE Association met at 9 o'clock, A.M., in the lecture-room of the Smithsonian Institution, the President, Dr. Paul F. Eve, of Tennessee, in the chair, supported on either side by Drs. D. Meredith Reese, of New York, and H. Frazer Campbell of Georgia, Vice-Presidents; and Drs. Robert C. Foster, of Tennessee, and A. J. Semmes, of Washington City, Secretaries.

The President announced Rev. Dr. Sunderland, of Washington City, who opened the proceedings with prayer.

The President having announced that reports were in order, Dr. Harvey Lindsley, Chairman of the Committee of Arrangements, on behalf of the Medical Profession of the District of Columbia, in a few appropriate remarks, extended a sincere and cordial welcome to the members of the Association.

On motion, the list of delegates, so far as it could be made, was then read by the Secretary, and twenty-five States, the District of Columbia, the Medical Staff of the U. S. Navy, and the American Medical Society in Paris, were represented. [During this session of the Association, more than 450 delegates were present].

Dr. Harvey Lindsley, Chairman of the Committee of Arrangements, reported that the session would be held from 9 A.M. to 3 P.M.; also that the President of the United States would be happy to receive the members of the Association, and their ladies, at the Executive Mansion, in the evening, at 8 o'clock.

Dr. H. Lindsley moved, that in order to furnish each State delegation an opportunity to choose a member to represent them on the Nominating Committee, a recess of fifteen minutes be taken, which was agreed to; and, at the conclusion of which, the following gentlemen were reported for the Committee:

Nominating Committee.—Job Holmes, Maine; Geo. H. Hubbard, New Hampshire; P. Pineo, Vermont; Ebenezer Alden, Massachusetts; Ashbel Woodward, Connecticut; J. Mauran, Rhode Island; H. D. Bulkley, New York; I. P. Coleman, New Jersey; Isaac Hays, Pennsylvania; H. F. Askew, Delaware; S. P. Smith, Maryland; Noble Young, District of Columbia; A. S. Payne, Virginia; W. H. McKee, North Carolina; W. T. Wrag, South Carolina; Jos. P. Logan, Georgia; J. T. Hargraves, Alabama; R. J. Breckenridge, Kentucky; J. Berrien Lindsley, Tennessee; W. M. McPheeters, Missouri; George Mendenhall, Ohio; Calvin West, Indiana; A. H. Luce, Illinois; Zina Pitcher, Michigan; Tom O. Edwards, Iowa; O. Harvey, California; George Clymer, U. S. Navy.

Dr. Pitcher, of Michigan, moved that the U. S. Army and Navy be entitled to representation on the Nominating Committee. After some discussion by Drs. Miller, of New York, and Condie, of Pennsylvania, the Chair decided in favor of the representation. This decision was appealed from, but a vote being taken, the Chair was sustained.

On motion, a Committee on Voluntary Essays was then appointed, consisting of Drs. Rohrer, of District of Columbia, Flint, of New York, and Hargraves, of Alabama.

The Chair announced that Dr. D. Meredith Reese, of New York, one of the Vice-Presidents of the Association, desired permission to make a communication; which having been granted, Dr. Reese read the following statement:

To the Officers and Members of the American Medical Association:

The undersigned, one of the Vice-Presidents of the American Medical Association, having, during the interval since our last meeting, certified to the professional fitness for the charge of the Blockley Hospital at Philadelphia, of an individual who had been expelled from this body for a violation of our Code of Ethics, after consultation with the other officers, and yielding to the advice of other personal friends, desires to say to the Association now assembled—

1. That in giving said certificate he was prompted solely by motives of sympathy and humanity to a fallen brother, who had been a personal friend prior to his offence; and that he did not realize, acting under the impulse of the moment, that his individual act could be construed by the profession as indicating hostility to his brethren.

2. That while his own mind is clear that his certificate contained only the truth, and that, under his peculiar relations to the party concerned, he could not withhold his certificate of medical qualification, consistent with conscience and duty, yet he is ready to concede that he had no abstract right to relieve the party from the censure of the Association until this body had restored him to its fellowship.

3. That so far from intending any disrespect to the Association, or to its act of discipline, the undersigned had publicly sustained and defended both. He therefore disclaims the inference from his certificate that he intended to recommend to a high professional office a man whom the Association had excluded, and thereby nullify the action of this body.

And finally, with these statements and disclaimers, the undersigned, while retaining his own opinion of the rectitude of his motives, and of his duty, under the peculiar circumstances of the case, is nevertheless prepared to defer to the judgment of those whom he knows to be his friends, that he erred in doing what he had no right to do, in view of his official position in the Association, and is hence called upon to offer this explanation and apology to his brethren.

D. M. Reese.

Dr. Condie, of Pa., moved that the apology be received. A substitute was offered, by way of amendment to this motion, declaring that the Code of Ethics of the Association had been violated. The amendment was not agreed to, and the original motion of Dr. Condie was adopted.

On motion of Dr. Atlee, of Pa., the statement of Dr. Reese was ordered to be entered upon the minutes.

Dr. James Bryan, of Pa., said that he was in the same position with Dr. Reese, and offered a similar statement; which was, on motion of Dr. Condie, of Pa., received.

On motion of Dr. Lindsley, of D. C., Dr. Paul F. Eve, of Tenn., the retiring President, delivered the Annual Address.

On motion of Dr. Atlee, of Pa., the President was requested to furnish a copy of his address for publication in the *Transactions* of the Association.

Reports from standing committees being in order, Dr. Grafton Tyler, of D. C., Chairman of the Committee on Prize Essays, submitted the following report:

The Committee on Prize Essays report that the essays received were three in number, each of which has been examined by them with great care, considering

first the intrinsic merits of each essay, and then their merits in relation to each other.

The Committee have discharged the responsible and delicate duty imposed upon them, with a consciousness of its great importance, and are gratified to be able to declare two of the essays submitted to their consideration, in their judgment, each worthy of a prize. The third they also highly commend.

The Committee award the first prize to the essay entitled "*An Essay on the Clinical Study of the Heart-Sounds in Health and Disease.*" It bears the motto, "*Clinica, clinice demonstrandum.*"

They award the second prize to the essay entitled "*An Essay on Vision, and some of its Anomalies, as revealed by the Ophthalmoscope.*" It bears the motto, "*Dux Hominum, medicus est.*"

GRAFTON TYLER,
J. C. HALL,
JNO. FRED. MAY,
THOMAS MILLER,
JOSHUA RILEY,
W. J. C. DUHAMEL,
A. J. SEMMES.
} *Committee on Prize Essays.*

On motion the report was accepted, and the essays were referred to the Committee on Publication. Dr. G. Tyler, then, in the presence of the Association, opened the sealed packets, disclosing the names of the authors, and found the "*Essay on the Clinical Study of the Heart-Sounds in Health and Disease,*" to which was awarded the first prize, to have been written by Dr. Austin Flint, of Buffalo, N. Y., and the "*Essay on Vision, and some of its Anomalies, as revealed by the Ophthalmoscope,*" to which was awarded the second prize, to have been written by Dr. Montrose A. Pallen, of St. Louis, Mo.

Dr. Caspar Wistar, of Pa., the Treasurer, presented his annual report, with the accompanying resolutions:

Resolved, That on or after any annual meeting of this Association, each of the back numbers of *Transactions* shall be sold at $2 apiece to permanent members, except that published during the year next preceding, this to continue at the price paid for it by delegates till the next annual meeting; and also,

Resolved, That as certain volumes are in great excess, the four vols., v., vii., viii., ix., shall be sold collectively to any permanent member who shall remit $5 to the Treasurer.

The Committee on Nominations, through their Chairman, Dr. Thos. O. Edwards, of Iowa, reported in part, as follows, which report was, on motion, unanimously adopted:—

President.—HARVEY LINDSLEY, Dist. of Columbia.

Vice-Presidents.—W. L. Sutton, Ky., Josiah Crosby, N. H., Thos. O. Edwards, Iowa, W. C. Warren, N. C.

Secretary.—Alex. J. Semmes, Dist. of Columbia.

Treasurer.—Caspar Wistar, Pa.

WEDNESDAY, *May 5th*, 1858.

The Association met at 9 o'clock, A. M., pursuant to adjournment, the President, Dr. H. Lindsley, in the chair.

Dr. Thos. P. Atkinson, of Va., submitted the following:—

Resolved, that the Constitution of this Association be so amended as to provide that no individual who shall be under sentence of expulsion or suspension from any State or Local Medical Society, of which he may have been a member, shall be received as a delegate to this body, or be allowed any of the privileges of a

member, until he shall have been relieved from said sentence by such State or Local Society.

The President decided that under the Constitution, amendments to it must lie over one year, and the resolution was accordingly laid on the table, for consideration at the next annual meeting.

Dr. Jas. R. Wood of N. Y., Chairman of the Special Committee on Medical Education, submitted his report, which was read, with the following resolutions:

Resolved, That the several Medical Colleges of the United States be requested to send delegates to a convention, to be held at on the day of for the purpose of devising a uniform system of medical education.

Resolved, That the present Report of the Special Committee on Medical Education be referred to such convention for its consideration.

Resolved, That said convention of delegates from the several colleges of the United States be requested to submit to the meeting of this Association, in May, 1859, the result of their deliberations.

On motion, the report was accepted and referred to the Committee on Publication; and the accompanying resolutions were laid on the table.

Dr. Thomas O. Edwards, of Iowa, submitted the following partial report:

The chairman of the Committee on Nominations begs leave to report that the committee recommend Louisville, Kentucky, as the next place of meeting of the Association.

Secretary.—S. M. Bemiss, of Kentucky.

Standing Committees.—*Committee on Publication.*—Francis G. Smith, of Philadelphia, Chairman; Caspar Wistar, of Philadelphia, A. J. Semmes, of Washington, D. C.; S. M. Bemiss, of Louisville, Ky.; Samuel L. Holingsworth, of Phila.; Samuel Lewis, of Phila., and H. F. Askew, of Delaware.

Committee on Medical Literature.—John Watson, of N. Y., Chairman; Lyndon A. Smith, of N. J.; C. G. Comegys, Ohio; R. W. Gibbs, S. C.; W. M. McPheeters, Missouri.

Committee on Prize Essays.—J. B. Flint, Louisville, Ky., Chairman; M. Goldsmith, ; Henry H. Miller, Louisville, Ky.; Ashbury Evans, Covington, Ky.; Calvin West, Ind.

Committee of Arrangements.—R. J. Breckinridge, Louisville Ky., Chairman; G. W. Ronald, B. M. Wible, D. W. Yandall, D. D. Thomson, N. B. Marshall, G. W. Buyluss, R. C. Hewitt, A. B. Cook.

Committee on Medical Education.—Geo. W. Norris, Phila., Chairman; A. H. Luce, Illinois; E. R. Henderson, S. C.; G. R. Grant, Tenn.; T. S. Powell, Geo.

The report of the committee was accepted, the nominations were confirmed, and the committee were granted permission to sit again.

On motion of Dr. Comegys, of Ohio, the resolutions submitted by the Special Committee on Medical Education were taken from the table for consideration.

A long discussion ensued, upon the motion of Dr. Hamilton, of N. Y., to refer the resolutions to a committee, consisting of one member from each delegation, representing a medical college, these members to be named by the college delegates present, and to report on Thursday morning, at ten o'clock. The debate on the motion was terminated by

the operation of the previous question, which was moved by Dr. Foster, of Tenn., and the motion of Dr. Hamilton was agreed to.

Dr. John F. Lamb, of Penn., moved that the vote by which the motion of Dr. D. Francis Condie, of Penn., accepting the apology of Dr. D. Meredith Reese, of N. Y., was carried, be reconsidered.

The President decided that a reconsideration was not in order without a suspension of the rules.

A motion to suspend the rules was made, and a division being called, there were found 111 votes in favor of the motion, and 82 against it. The Chair declared that the rules were not suspended, two-thirds not having voted in the affirmative.

An appeal was taken from the decision, and the decision of this Chair was reversed; and the motion of Dr. Lamb to reconsider was agreed to by a vote, on a division, of yeas 142, nays 70.

On motion, the case of Dr. Bryan, of Penn., was laid on the table. Dr. Beck, of Indiana, moved an indefinite postponement of the whole subject. The Chair decided that debate on the motion was not in order.

Dr. Jewell, of Pa., rose to a point of order, when the Chair reversed its decision.

Dr. Jewell then proposed to read the memorial upon the subject from the Philadelphia County Medical Society, when Dr. Biddle, of Pa., objected to it as out of order.

The President decided that the point was not well taken, from which decision Dr. Biddle appealed.

The appeal was not submitted; and upon motion, the Association went into Committee of the Whole for the consideration of the whole subject of the apology of Dr. Reese; and Dr. Thomas O. Edwards, of Iowa, was called to the chair.

After some time had been spent therein, the Committee of the Whole rose, and, through their chairman, reported to the Association that the Committee had had the apology of Dr. D. Meredith Reese, of N. Y., which had been referred to them, under consideration, and had arrived at the following conclusion thereon: that it was considered "ample, full, complete, and satisfactory."

On motion, this report was received and adopted. Dr. Lamb moved that the apology of Dr. Reese be amended by the insertion of the word "regret." After some debate upon this motion, Dr. Reese submitted the following statement:

> The undersigned regrets that he certified to the professional qualifications for Blockley Hospital, Philadelphia, of an expelled member of this body, and hereby offers his apology for his departure from the ethical code.
>
> (Signed), D. M. REESE.

On motion, this apology was accepted as satisfactory. Dr. Bryan, of Penn., then offered the same as the language of his apology, which was accepted by the Association upon a motion to that effect.

On motion, the Association adjourned.

THURSDAY, *May* 6, 1858.

The President called the Association to order at nine o'clock.

The following resolution, offered by Dr. R. C. Foster, of Tenn., was adopted:

Resolved, That all reports from Committees on Epidemics and Medical Topography be referred to the Committee on Publication, and all communications from Special Committees be referred to the Committee on Nominations.

Dr. Frank H. Hamilton, of N. Y., from the Committee of Delegates from Medical Colleges, to whom were referred the resolutions reported by the Special Committee on Medical Education, submitted the following report:

The Committee to whom was referred the resolutions appended to the report of the Special Committee on Medical Education, have adopted the following preamble and resolution: Fully appreciating the value and importance of the resolution under which we have been appointed, but a majority of the gentlemen constituting this Committee not being authorized by the medical faculties of the several colleges with which we are connected to act as their representatives in this matter; and moreover regarding it as quite impossible to secure a convention of delegates in the interim of the meetings of this Association—

Resolved, That we recommend to all the medical colleges entitled to a representation in this body, that they appoint delegates especially instructed to represent them in a meeting to be held at Louisville, on Monday, the day immediately preceding the convention of the American Medical Association for the year 1859, at ten o'clock in the morning, at such place as the Committee of Arrangements shall designate.

S. D. Gross, *Chairman.*
Frank H. Hamilton, *Secretary.*

This report was accepted, on motion of Dr. Kemp, of Md., and the preamble and resolution were adopted, and the committee instructed to meet in Louisville on the Monday preceding the session of 1859.

Reports from special committees for 1858 being now in order, the reports of Committees on Medical Topography and Epidemics having previously been referred to the committee on Publication without reading, Dr. J. Foster Jenkins, of N. Y., Chairman of the Committee on "Spontaneous Umbilical Hemorrhage of the Newly Born," presented his report, which was accepted and referred to the Committee on Publication.

Dr. S. M. Bemiss, of Ky., Chairman of the Committee on Influence of Marriages of Consanguinity upon Offspring, read his report, which was accepted and referred to same committee.

Dr. Atlee, of Penn., from the Committee on the subject of preparing a stone for the Washington National Monument, reported that such had been done; that it was of Vermont marble, and was ornamented with a relief representing Hippocrates refusing the presents of Artaxerxes, with the inscription, "Vincit amor patriæ." The report, with the accompanying resolutions, was accepted and referred to the Committee on Publication.

Dr. E. Andrews, of Ill., Chairman of the Committee on Functions of Different Portions of the Cerebellum, offered, through Dr. A. B. Palmer, of Mich., an abstract of his report, which was read and referred to the same committee.

Dr. H. Fraser Campbell, of Geo., Chairman of the Committee on the Nervous concomitants in Febrile Diseases, read a report, which was accepted and referred to the same committee.

Dr. J. Marion Sims, of New York, Chairman of the Committee on Treatment of the Results of Obstructed Labor, read his report, which was accepted and referred to the same committee.

Dr. Mark Stephenson, of N. Y., Chairman of the Committee on the Treatment best adapted to each Variety of Cataract, with the Method of Operation, Place of Election, Time, Age, etc., read an abstract of his report, which was accepted and referred to the Committee on Publication.

Dr. C. B. Coventry, of N. Y., Chairman of the Committee on the Medical Jurisprudence of Insanity, and the Testimony of Skilled Witnesses in the Court of Justice, communicated his report, which was accepted and referred to the Committee on Publication.

Dr. Edwards, of Iowa, from the Committee on Nominations, presented the following report for Special Committees for 1859:

Special Committee on the Microscope.—Drs. John G. F. Holstein, of Zanesville, Ohio; John C. Dalton, Jr., of New York; David Hutchinson, of Mooresville, Indiana; A. R. Stout, of San Francisco, California; Calvin Ellis, of Boston, Mass.

Special Committee on Medical Jurisprudence.—Drs. Stephen Smith, of New York city; Frank H. Hamilton, of Buffalo, N. Y.; Dixi Crosby, of Hanover, N. H.; S. S. Purple, of New York city; Isaac S. Mulford, of Camden, N. J.

Committee on Quarantine.—Drs. Elisha Harris, of New York; J. M. Moriarty, of Boston, Mass.; R. La Roche, of Philadelphia; W. L. Wragg, of Charleston, S. C.; E. D. Fenner, of New Orleans, La.

Committee on Surgical Pathology.—Dr. James R. Wood, of New York.

Diseases and Mortality of Boarding Schools.—Dr. C. P. Mattingly, of Kentucky.

On the Various Surgical operations for the Relief of Defective Vision.—Drs. Montrose A. Pallen, St. Louis, Mo.; T. J. Cogley, Madison, Ind.

Milk Sickness.—Dr. Edward Murphy, New Harmony, Ind.

On the Blood Corpuscle.—Dr. A. Sager, Ann Arbor, Mich.

On Medical Ethics.—Drs. John Watson, New York; John C. Dalton, Lowell, Mass.; G. Emerson, Philadelphia, Pa.; Frank H. Hamilton, Buffalo, N. Y.; P. C. Gaillard, Charleston, S. C.

On the Pons Varolii, Medulla Oblongata, and Spinal Marrow, their Pathology and Therapeutics.—Dr. S. P. Richardson, Louisville, Ky.

On the American Necrology; the Hygienic Relations of Air, Food, and Water, the Natural and Artificial Causes of their Impurity, and the best Method by which they can be made most effectually to contribute to the public health.—Dr. C. C. Cox, Easton, Md.

On the Effect of Virus of Rattlesnake, etc., when introduced into the System of the Mammalia.—Dr. A. S. Payne, Paris, Fauquier Co., Va.

On the Climate of the Pacific Coast, and its Modifying Influences upon Inflammatory Action and Disease generally.—Dr. A. Harvey, Placerville, Cal.

The Constitutional Origin of Local Diseases, and the Local Cause of Constitutional Diseases.—Dr. C. F. Heywood, New York.

Special Committee on Epilepsy.—Dr. John G. Kyle, Ohio, Chairman; Drs. John G. F. Holston, Zanesville, Ohio; D. Copper Ayres, Green Bay, Wisconsin; H. J. Dunahoe, Sandusky, Ohio; Calvin West, Ind.

Causes of the Impulse of the Heart, and the Agencies which Influence it in Health and Disease.—Dr. J. W. Corson, of New York city.

Best Substitutes for Chinchona and its Preparations in the Treatment of Intermittent Fever, etc.—Dr. B. S. Woodworth, of Fort Wayne, Ind.

Special Committee on Government Meteorological Reports.—Drs. Paul F. Eve, Tennessee; Zina Pitcher, Michigan; R. H. Coolidge, U. S. Army; Thomas Miller, D. C.

To fill Vacancies in the Committee on Medical Topography and Epidemics; and

Continuations of the Committees.—Maine, James C. Wilson, M.D., of Bangor; New Hampshire, Albert Smith, M.D., of Peterborough; Vermont, J. Perkins, M.D., of Castleton; North Carolina, James H. Dixon, M.D., of Wilmington; South Carolina, Peter C. Gaillard, M.D., of Charleston; California, Thomas M. Logan, M.D., of Sacramento; Michigan, J. H. Beech, M.D., of Cold Water; Connecticut, Charles Hooker, M.D., of New Haven.

Dr. Edwards also reported from the Committee of Nominations the following resolution:

Resolved, That a committee of nine be appointed by the Chair to wait on the Hon. Howell Cobb, Secretary of the Treasury, and respectfully to request the restoration of Dr. M. J. Bailey, as inspector of drugs and medicines for the port of New York.

This report was, on motion, accepted and adopted.

On motion of Dr. G. Tyler, of D. C., the vote by which the whole report was adopted was reconsidered, and the report was divided; and that portion of the report that referred to nominations for committees was adopted. Dr. Bolton, of Va., then moved the adoption of the resolution accompanying the report of the committee. Dr. C. C. Cox, of Md., offered the following resolution as a substitute:

Resolved, That the appointment of inspectors of drugs and medicines in the various ports of the United States should, in the opinion of this Association, have regard to the essential, moral, and scientific qualifications of the candidates, and not to considerations of personal favoritism or political bias.

Dr. Parker, of Va., offered two other resolutions as a substitute, which were not agreed to.

The question recurring on the adoption of the substitute offered by Dr. Cox, it was not agreed to.

Dr. Wilcox, of Connecticut, then moved an amendment to the resolution, by adding the words, "disclaiming all political considerations," which amendment Dr. Edwards accepted.

After some discussion, Dr. Rogers, of New York, moved to lay the resolution on the table.

The previous question was demanded and sustained.

The motion to lay on the table was lost, yeas 49, nays 64; and the resolution offered by Dr. Edwards, from the Committee on Nominations, was adopted with the amendment by a vote of yeas 79, nays, 52, and read as follows:

Resolved, That a committee of nine be appointed by the Chair to wait on Hon. Howell Cobb, Secretary of the Treasury, and respectfully to request the restoration of Dr. M. J. Bailey as inspector of drugs and medicines of the port of New York, at the same time disclaiming all political considerations.

Dr. Grant, of New Jersey, presented a complaint made by the Newark Medical Society against the New York Medical College, for a violation of the ethics of the profession. Dr. Edwards, of Iowa, presented a similar complaint, and Dr. Oakley, of New Jersey, a complaint from the Union and Essex County Medical Societies. They were received and referred to the Committee on Ethics.

Dr. W. L. Sutton offered the following:

Resolved, That a committee of three, to be composed of members belonging to

the District of Columbia, be appointed, whose duty it shall be to urge upon the Census Bureau the great interest which this Association feels in a properly conducted census, and especially that portion relating to the vital statistics; and the importance of securing, at an early day, the services of a physician conversant with vital statistics, to assist in arranging the schedules in that department of the census to be taken in 1860; as also to aid in a general supervision over that branch of the census.

This resolution was adopted, and the following gentlemen appointed as the committee: Drs. Thomas Miller, Thomas Antisell, and A. Y. P. Garnett, all of D. C.

Dr. W. L. Sutton, of Ky., also offered the following resolution:—

Resolved, That a committee of five be appointed, whose duty it shall be to present to the next meeting of this Association a plan for a uniform system of registration of births, marriages, and deaths, including the nomenclature, as also the classification of diseases to be adopted in registration reports, and that the report from Dr. E. Jarvis to this meeting be submitted to their use for the balance of this session.

This resolution was also adopted, and the following gentlemen appointed as the Committee, viz: Drs. W. L. Sutton, Ky.; Edward Jarvis, Mass.; Edward M. Snow, R. I.; Wilson Jewell, Penn.; R. W. Gibbes, S. C.

Dr. Kyle, of Ohio, offered the following resolution, which was laid over till the next meeting under the rules:—

Resolved, That the Constitution of this Association be so amended as to prohibit the admission as a delegate, or the recognition as a member of any person who is not a graduate of some respectable medical college.

Dr. L. A. Smith presented resolutions of the Medical Society of New Jersey praying for such changes of the Constitution as would establish a Board of Censors in every Judical Circuit of the Supreme Court, who should examine and grant diplomas to all proper members of this Association. Laid over for one year under the rules.

On motion of Dr. L. Humphreys, of Indiana, the following preamble, resolution, and circular, were ordered to be incorporated in the Transactions of the Association, viz:—

Whereas, A circular, looking to the interchanges of the published *Transactions* of the various local Medical Societies of the United States, was unanimously recommended at the last meeting of the Indiana State Medical Society.

And whereas, It is in the power of this Association to promote and successfully carry out the object thereof; therefore,

Resolved, That we cordially approve of a general interchange of published *Transactions* between the various local societies of the United States, and that to carry out this desirable object the delegates of the various societies which publish their *Transactions*, be requested to leave the name and P. O. address of the Secretary thereof with the Secretary of this Association, which shall be published with its proceedings, and each society is hereby recommended to send by mail, prepaid, *three copies* of their published *Transactions* to all of the other societies included in such list.

On motion of Dr. H. Fraser Campbell, of Geo., it was

Resolved, That this Association has learned with deep regret of the death of the following permanent members of this body: Marshall Hall, *England;* C. R. Walter, Georgia; S. W. Clanton, Alabama; W. G. Craighead, Virginia; Jno. K. Downes, Connecticut; Nathan S. Pike, Connecticut; W. W. Morris, Delaware; and William Gries, of Pennsylvania.

On motion of Dr. Phelps, the following resolutions were passed unanimously:

Resolved, That the thanks of this Association are eminently due to the Regents and Professor Henry of the Smithsonian Institution, for the ample and convenient accommodation afforded for the transaction of business.

Resolved, That the Committee of Arrangements are entitled to our praise and highest appreciation of their exertions to promote the comfort of the members and the best interests of the Association.

Resolved, That to the physicians of Washington and Georgetown, and the faculty of Georgetown College, we accord the homage of our sincerest thanks for their elegant hospitalities extended to the members from abroad, by which the pleasure of their sojourn here has been so greatly enhanced.

Resolved, That we feel sure that the impressions on the tablet of memory received here in our national metropolis, in this the first year of the second decade of the Association, will long remain an evidence of the urbane attentions received not only from the Chief Magistrate and other public functionaries of our glorious Union, but of private citizens and the community at large.

Resolved, That the manifestations of union of heart and purpose, in the action of this session, inaugurate a new era, and call for devout acknowledgment to Divine Providence, and presage, as we trust, not only a bright future for the Association, but also as contributing to the perpetuity and prosperity of our great national confederation.

On motion of Dr. L. A. Smith, of N. J., Dr. Peter Parker, ex-Commissioner to China, was then introduced. He exhibited some curious specimens of *calculi*, as the results of thirty-eight operations upon Chinese. They were of various shapes and compositions, and weighed from a few drachms up to three, seven, and eight ounces.

Dr. Dunbar moved a reconsideration of the vote by which the resolution reported by the Committee on Nominations, asking the restoration of Dr. Bailey to the post of Inspector of Drugs for the city of New York, was adopted.

After discussion, the previous question was demanded and sustained, and under its operation a division was had, and the motion to reconsider prevailed—yeas 51, nays 32.

On motion of Dr. McNulty, of New York, the whole subject was indefinitely postponed.

The Association, then, on motion, adjourned until 5 o'clock P.M.

THURSDAY, *May* 6—5 *o'clock* P.M.

The Association assembled at 5 o'clock P.M., Dr. W. L. Sutton, of Kentucky, one of the Vice-Presidents, in the chair. Dr. T. L. Mason, of New York, moved an amendment to the Constitution, as follows:—

In first line, second paragraph, of Article II., after the words "shall receive the appointment from," to insert, "any Medical Society *permanently* organized in accordance with the laws regulating the practice of physic and surgery in the State in which they are situated, and consisting of physicians and surgeons regularly authorized to practise their profession." Laid over till next year, under the rules. To add to the sixth paragraph, Article II., "But each permanent member of the first class designated in this plan of organization shall be entitled to a seat in this Association, only on his presenting to this body a certificate of his good standing, signed by the secretary of the society to which he

may belong at the time of each annual meeting of this body." Laid over till next year, under the rules.

Dr. Henry Hartshorne, of Pennsylvania, moved the following amendment to the Constitution, which was also laid over, viz.: To add to the second article, "No one expelled from this Association shall at any time thereafter be received as a delegate or a member, unless by a three-fourths vote of the members present at the next meeting to which he is sent, or at which he is proposed."

The amendments which were proposed at the last meeting at Nashville were then considered *seriatim*, on a motion to that effect. They were read as follows :—

Amend the third article of the Constitution, in relation to meetings, by inserting after the words "first Tuesday in May" the words "or the first Tuesday in June;" and also inserting after the words "shall be determined" the words "with the time of meeting."

In Article II. omit the words "medical colleges," and also the words "the faculty of every regularly constituted medical college or chartered school of medicine shall have the privilege of sending two delegates."

After some discussion, both the proposed amendments were rejected, two-thirds not voting in favor thereof.

Dr. John Watson, of New York, from the Committee on Ethics, reported as follows :—

Whereas it appears from undoubted testimony that the New York Medical College have conferred the degree of Doctor of Medicine upon a notorious quack, of the name of John F. Dunker, of Newark, the faculty, in the person of the President of said College, wish here to declare that this degree was obtained under gross deception, and false testimonials furnished by said Dunker and his friends; and they therefore revoke and annul his diploma, and declare said Dunker to be unworthy of patronage or support from authority conferred upon him by this diploma.

Dr. C. C. Cox, of Maryland, moved that the report be indefinitely postponed; which was not agreed to.

On motion, the report was then adopted.

The amendments proposed by Dr. Stocker, of Pennsylvania, at the annual meeting in 1856, at Detroit, were then taken from the table, for consideration.

The following were the amendments proposed, viz. :—

Article III. Strike out all after the words "first Tuesday in May," and insert as follows: "The Association shall meet biennially in the city of ————. The place of meeting for the intermediate year shall be determined by a vote of the Association."

Article IV. In first paragraph, second line, instead of the words "two Secretaries" insert "one permanent and two assistant Secretaries." In fourth paragraph, fifth line, strike out the words "the Secretary," etc., and substitute, "The *permanent* Secretary shall preserve the archives and unpublished transactions in the permanent place of the meeting of the Association. His expenses for travelling to and from the place of meeting, and while in attendance upon the same, shall be defrayed by the Association."

Upon the amendment proposed to Article III., the vote was yeas 80, nays 42; and upon the first amendment to Article IV., the vote was yeas 84, nays 53. Neither of the amendments having received the

constitutional majority of two-thirds, the President declared them to be rejected.

A motion was made to postpone indefinitely the second amendment proposed to Article IV.

Dr. Stocker moved to lay the motion to postpone upon the table.

Pending this, a motion was made to lay the amendment upon the table ; which was agreed to.

Dr. Robert C. Foster, of Tennessee, offered the following resolution, which was adopted, viz. :

Resolved, That the Committee on Publication be instructed to collect all of the by-laws and resolutions, which have not been rescinded, through the different volumes of the *Transactions*, to arrange them under their respective heads, and append the same to the Constitution.

The following amendment to the Constitution was proposed by Dr. J. Berrien Lindsley, of Tennessee, through Dr. Bowling, of Tennessee, and was laid over, under the rules, viz. :—

In Article II. omit the words "medical colleges, hospitals, lunatic asylums, and other permanently organized medical institutions, of good standing, in the United States ;" and also to omit the words "The faculty of every regularly constituted medical college or chartered school of medicine shall have the privilege of sending two delegates. The professional staff of every chartered or municipal hospital, containing an hundred inmates or more, shall have the privilege of sending two delegates; and every other permanently organized medical institution, of good standing, shall have the privilege of sending one delegate."

Upon motion of Dr. Kemp, of Maryland, the thanks of the Association were extended to those railroad companies which had agreed to pass the members to their homes free of charge ; and also to all those citizens of Washington, including members of the press, whose courteous attentions had placed the Association under obligations.

On motion, the Association adjourned *sine die*.

A. J. Semmes, } *Secretaries.*
S. M. Bemiss, }

CORRESPONDENCE.

Report of cases of curvature of the spine treated by mechanical appliances. By J. A. Wood, M.D. (Continued from vol. iii. No. 3.)

Case 3.—Son of Mr. Otis Gay, of West Roxbury, Mass., aged 2 years and 1 month, of light complexion, and scrofulous diathesis, came under treatment for Pott's disease of the spine, June 15, 1855.

The deformity in this case consisted both of a lateral and angular projection of the spine, each well defined and strongly marked, as seen in fig. 1.

The former consisted of a bold reflection of the spine to the left, extending from the cervix to the sacrum, and the latter of an angular projection of the eighth, ninth, and tenth, dorsal vertebræ.

To avoid tedious detail, I give only a few of the leading facts in the history of this case, as related by the mother.

She informed me that the child had always evinced a peculiar weak-

ness of the back from its birth, a few months after which an irregularity in the course of the spine was discovered.

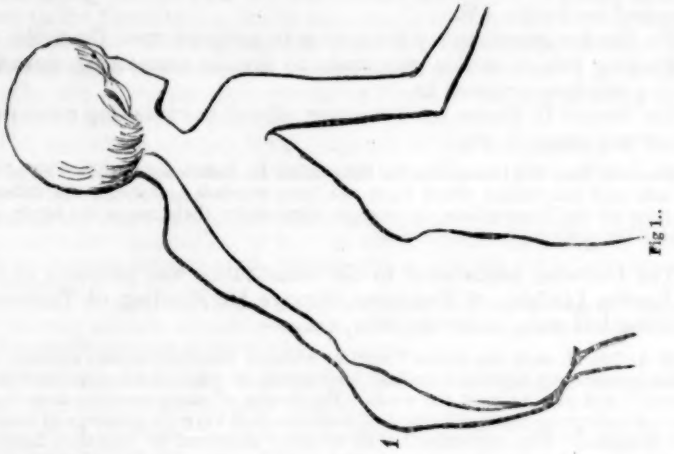

Fig 1.

There was a tardy development of strength, and a manifest want of the ordinary physical force and energy in the child, up to the age of 16 months, when it was suddenly attacked with apparent paralysis, and remained *perfectly* helpless for many weeks, with slight *occasional* febrile excitement, extreme paleness, and ultimate emaciation.

The recovery from this attack was protracted and imperfect, during which the deformity continued with a more rapid increase than at any previous period of the disease, and overpowered by all the contingencies in the case, the child had never been able to walk, up to the commencement of the treatment.

The body was thrown into such a position, by this distortion of the spine, that the abdominal viscera were pressed with great force into the left iliac region, presenting there the appearance of a large tumor, as seen in fig. 1, in the accompanying cut.

The early history of this case, and its subsequent developments, suggest the following inquiry. Is Pott's disease of the spine *ever* congenital?

The treatment applied in this case, was simply mechanical, spring-like in its action, and comfortable to the patient, a generous diet and exercise in the open air.

Four days from the first application of the apparatus, the patient walked across the room, and four weeks from that time, he walked a third of a mile without any apparent fatigue.

By keeping the apparatus well adjusted, and supporting properly every part embraced by it, the general health and strength improved rapidly, the deformity gradually diminished until nearly removed, when the process was somewhat interrupted by inattention of those having

charge of the child, to the instructions they had received. Consequently, there yet remains a *very slight* lateral variation of the spine, from a normal position, yet susceptible of removal, not exhibited in fig. 2, as the object of these reports is to illustrate more particularly, the result of treatment in angular curvature of the spine.

With this exception, fig. 2 illustrates correctly the result of treatment in the case.

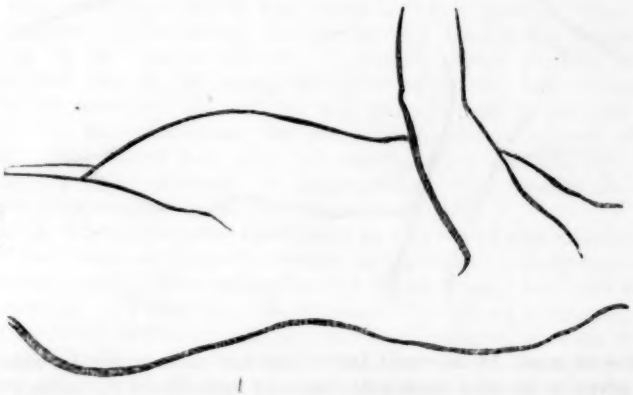

Fig. 2.

The patient has grown rapidly, and for more than two years has been vigorous, robust, *fat*, and healthy.

Case 4.—Son of Mr. Horace Hopkins, of Chicago, Ill., aged 8 years, of light complexion, strumous habit, pale, emaciated, and sickly in appearance, weight, 36lbs. (precisely what it was four years previous), came under treatment for Pott's disease of the spine, March 3, 1857.

The disease had existed more than three years, and involved the 5th, 6th, and 7th dorsal vertebræ, producing at that point a formidable posterior projection of the spinal column, with its consequent results to the contour of the whole system, as seen in Fig. 3.

Anchylosis seemed nearly, or quite complete, and no encouragement was given as to the result of treatment, beyond an improvement of the general health, and, perhaps, to some slight degree the general form and figure of the patient, as circumstances would seem to forbid the accomplishment of more than that.

The improvement in the form of the patient, as the result of treatment, is shown in fig. 4, which may be contrasted with the one above to illustrate it more fully, both of which were drawn with care and accuracy.

The improvement of the general health and strength was still greater, as when first received the patient was able to walk a few rods *only*, without being obliged to rest; but, at the expiration of two months, he had become strong, robust, and healthy, exercising vigorously upon his feet through the day, without any apparent fatigue.

The parents were then permitted to take the patient home. In May, after the lapse of one year, he returned again greatly improved,

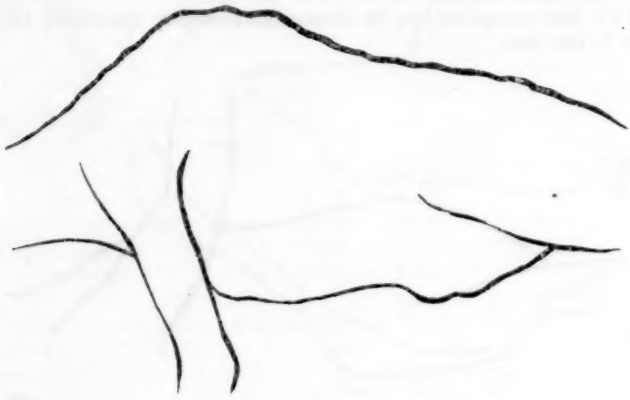

Fig. 3.

but not as much as he would have been had more particular attention been given to his case during the last six months, as the apparatus he wore had not been kept properly adjusted, being somewhat out of repair.

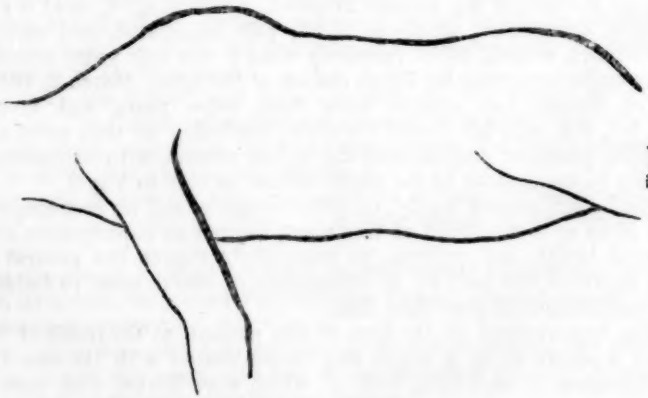

Fig. 4.

This case is reported more particularly to show the advantage of well-adjusted, appropriate, mechanical support to patients embarrassed and overpowered by the *burden* of *position* often enforced upon them by the destruction of some portion of the spinal column.

The treatment consisted in the adjustment and readjustment of an apparatus, briefly described in a former number of the *N. Y. Journal of Medicine*, galvanism, free diet, and what exercise the patient could bear.

---

*On the influence of blisters in quickening the effects of mercury upon the system.** By A. N. Bell, M. D., of Brooklyn, N. Y. *Case* 1. In May, 1843, I was called to a child, six years old, in a typhoid condition, who seven days before had taken a "worm-powder" from her schoolmaster. After taking the powder, her bowels had been open daily up to the time of my visit. I applied blister plasters to her ankles, and ordered an enema of spirits turpentine and castor oil. Early next morning I was sent for, and was surprised to find her salivated. She was wide awake, however, and complained bitterly of her mouth. The enema had been followed by three copious dejections including a large discharge of lumbricoides. The powder she had taken was ascertained to be four grains of calomel.

Case 2. About two years subsequent to this case, I was called to see a deaf and dumb old lady, who awoke on the morning of my visit with a very sore mouth, after having the day before scalded her hand while making soap. "Yesterday," she explained through an interpreter, "I burnt my hand, as you see, and this morning I woke up with the fire in my mouth." More than a week before, her bowels being confined, she had taken two pills that were left over from some other prescription. They did not operate much, but she felt relieved somewhat, and made no further complaint. The pills were the compound cathartic: she was salivated.

Case 3. The next case occurred nearly ten years ago, in a man who visited me on board ship, for a swollen elbow. As he could not speak English, and I could speak but little Spanish (it was on the coast of Mexico), I did not learn as much of his history as desirable, and only applied a blister plaster to the swelling, directing him to call again soon. He came next day, salivated. He had a bubo, and had been taking a blue pill twice a week for a month.

This class of affections has, more than all others, led me to the conclusion that *cutaneous irritation, during the presence of mercury in the system, is likely to develop its influence, or increase the activity of mercury when its influence is already manifest.*

In the treatment of *indolent* bubo, it has been my practice for several years either to apply blister plasters for the double effect of their local action and the mercurialization of the system, or not to apply them while the constitution is under the influence of mercury, unless it is desirable to increase its activity. In inflammation of serous membranes, in croup, or in any disease whatever, where there is a necessity for the certain and speedy action of mercury upon the system, we believe it can be hastened by a blister plaster.

---

* Read before the Brooklyn Medical Society.

Luxation of the femur into the sciatic notch (ilio ischiatic)—Reduction by Reed's method (Reported by DR. BURRALL, House-Surgeon to Bellevue Hospital).—During Dr. Parker's attendance at the hospital, Nicholas St. P——, aged 53, a mechanic by trade and a native of Canada, was admitted, and gave the following history:

Two days before his admission, while attempting to get on the front of one of the avenue cars as it passed him, he was shoved off by the conductor. The side of the car struck him upon the right hip, and whirled him about, causing him to fall at last upon the right side.

A measurement of the two limbs from the anterior superior spinous processes, showed them to be of equal length. The axis of the right thigh was directed through the left knee, and the right foot was somewhat everted. Adduction, and rotation inwards, were more easily accomplished than an abduction, and rotation outwards. When standing, being supported at the shoulders, the patient would rest his weight partially upon the affected limb. There was great prominence of the gluteal fold, and the right trochanter was further removed from the median line than that of the opposite side. The limb swung rather loosely when raised from the ground, the axis of the thigh still directed towards the opposite knee, and the foot turned rather outwards than inwards. The different manipulations gave a sensation like the rubbing together of two smooth, bony surfaces, and caused considerable pain. The right leg had been previously broken.

A consultation having been called, the patient was etherized, and the reduction of the limb easily accomplished by Dr. Parker. The patient's feet were then tied together, and he was carried back to the ward. There was retention of urine subsequent to the operation, which yielded to a few introductions of the catheter. The limbs, after the reduction, were of equal length. The patient was kept in bed for two weeks, when on rising he was able to walk easily with slight assistance, and soon after was discharged cured.

PUBLICATIONS RECEIVED.

Transactions of the Medical Society of the State of New York, for the year 1858. Albany, 1858.

Bennett (John Hughes) Clinical Lectures on the Principles and Practice of Medicine. Second edition, New York: Samuel S. & William Wood, 1858.

Brodie (Sir Benjamin) Mind and Matter; or Physiological Inquiries. New York: Samuel S. & William Wood, 1858.

Forbes (Sir John) Of Nature & Art in the Cure of Disease. New York: Samuel S. & William Wood, 1858.

Carnochan (J. M.) Contributions to Operative Surgery and Surgical Pathology, with illustrations drawn from nature. Philadelphia: Lindsey & Blakiston, 1858.

Proceedings of the American Pharmaceutical Association at the sixth annual meeting held in Philadelphia, September, 1857, with Constitution and list of the members. Philadelphia, 1857.

Third Annual Report of the Trustees and Superintendent of the Northern Ohio Lunatic Asylum, for the year 1857. Columbus, 1858.

Proceedings of Academy of Natural Sciences of Philadelphia, 1858.

On Intra-Capsular fracture of Cervix Femoris, with bony union; and an interesting case of Urinary Calculi, illustrated by engravings. By Alden March, M.D. Albany, 1858.

CONTENTS.—NO. II.

PART I.—ORIGINAL COMMUNICATIONS.

PAGE

ART. I.—Description of a new Midwifery Forceps, having a Sliding Pivot to prevent compression of the Fœtal Head (with cases.) By GEORGE T. ELLIOT, Jr., M.D., ... 159

ART. II.—On the Changes of Blood-cells in the Spleen. (An Abstract of an Inaugural Thesis) By HENRY DRAPER, M.D., 182

ART. III.—Remarks on the Treatment of Fractures of the Thigh, with a new Apparatus. With report of cases (continued from page 330, vol. ii., 3d Series). By J. H. HOBART BURGE, M.D., 189

ART. IV.—Remarks on the Employment of Pessaries, with the Description of a New Instrument. (With Illustrations.) By E. NOEGGERATH, M.D., of New York, ... 198

ART. V.—Practical Observations on the Yellow Fever, as it has appeared in Galveston, Texas. By F. BACON, M.D., . . 205

ART. VI.—An Account of a Case of Congenital Deficiency of the left Kidney. By C. E. ISAACS, M.D., ... 218

ART. VII.—Remarks on the Treatment of Gleet by Local Remedies. By WM. OTTERSON, M.D., of Brooklyn, N. Y., . . 219

ART. VIII.—Dr. Tully's Classification and the Principles of Therapeutics. By JEFFERSON CHURCH, M.D., Springfield, Mass., . 222

ART. IX.—Clinical Reports from the Hospitals of New York; prepared for the NEW YORK JOURNAL OF MEDICINE, . . . 234

PART II.—CRITICAL ANALYSIS.

ART. X.—Human Histology in its relations to Descriptive Anatomy, Physiology, and Pathology. By E. R. PEASLEE, A.M., M.D., Professor of Physiology and Pathology in the New York Medical College, etc., etc., ... 254

ART. XII.—The Principles and Practice of Obstetrics, including the Treatment of Chronic Inflammation of the Uterus, considered as a frequent cause of Abortion. By HENRY MILLER, M.D., of the Louisville University, ... 259

PAGE

ART. XIII.—Researches on Primary Pathology, and the Origin and Laws of Epidemics. By M. L. KNAPP, M.D., etc. etc., . 262

BIBLIOGRAPHICAL NOTICES.

ART. XIV.—Elements of Inorganic Chemistry, including the application of the Science in the Arts. By THOS. GRAHAM, F.R.S.L. and E., late Prof. of Chemistry in University College, London, 267

ART. XV.—Contributions to Operative Surgery, and Surgical Pathology. By J. M. CARNOCHAN, Professor of Surgery in the New York Medical College, etc., ... 268

ART. XVI.—A Manual of Medical Diagnosis: being an Analysis of the Signs and Symptoms of Disease. By A. W. BARCLAY, M.D, 268

ART. XVII.—A Treatise on the Employment of the Speculum in the Diagnosis and Treatment of Uterine Disease, with three hundred Cases. By ROBERT LEE, M.D., ... 269

ART. XVIII.—An Essay upon the Relation of Bilious and Yellow Fever. By RICHARD D. ARNOLD, M.D., ... 269

PART III.—MEDICAL RETROSPECT.

Report on the Progress of Obstetrics and Diseases of Women; prepared for the NEW YORK JOURNAL OF MEDICINE. By E. NOEGGERATH, M.D., ... 270

Report on the Progress of Infantile Pathology and Therapeutics; prepared for the NEW YORK JOURNAL OF MEDICINE. By A. JACOBI, M.D., ... 280

EDITORIAL.

The Academy of Medicine, ... 288

Nursery and Child's Hospital, ... 289

The New Island Hospital, ... 290

Tonic Nutritive Wine, ... 291

Wood-cut Illustrations, ... 292

Death of HENRY A. FORD, M.D., ... 293

Destruction of the Quarantine Buildings by a Mob, . . . 293

The New Sydenham Society of London, ... 295

New Medical Periodicals, ... 295

Medical Instruction in the City of New York, ... 295

Publications Received, ... 296